1112 eMARS InfoAdvantage XI 3.1 Custom Reporting

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infoAdvantage: Custom Reporting

Prerequisites

You should have completed the following courses before continuing:

- eMARS 101 Intro to eMARS Independent Study Guide (ISG)
- eMARS 110 Chart of Accounts
- 1102 eMARS Standard Reporting Introduction to InfoAdvantage

Objective

The infoAdvantage Custom Reporting course will give you a better understanding of infoAdvantage and expose you to intermediate to advanced functionality that may aid in more reporting needs.

At the conclusion of this session, you will be able to:

- *Create* and *Run* a *Basic Query/Report*
- Apply *Conditions*, *Prompts* and *Filters*
- Apply *Basic Formatting* and *Complex Formatting--Sections* and *Breaks*
- Use *Drill Down* and *Scope of Analysis* Functionality
- Apply *Formulas* and *Variables*
- Merge multiple Data Providers.

Instructor Led Course

This course is presented in a computer lab or training room with an instructor and one or more facilitators. The instructor will present the information by walking students through the training manual and completing the examples in each chapter on the screen. The students in the class will follow by doing the same steps as the instructor. At the end of each chapter, the students will be asked to complete an exercise containing review questions about the material covered and hands-on exercises.

Training Data

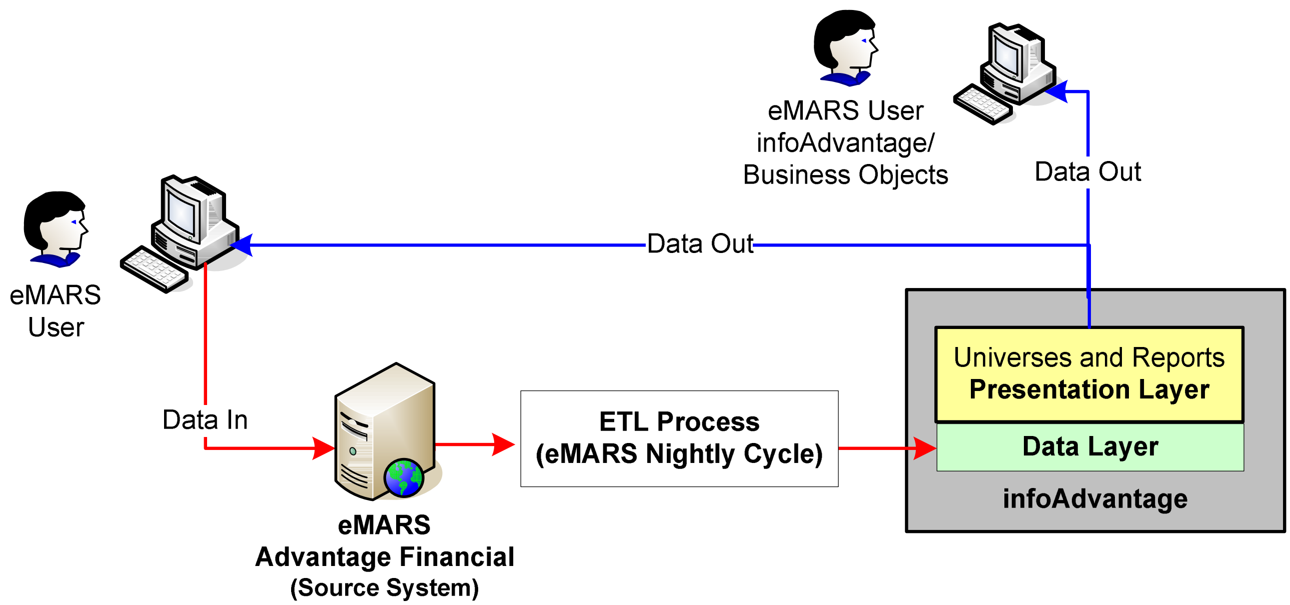
The *General Accounting Universe* will be used in this course. *Training IDs* are provided and access to Department 785, Finance Facilities data, with permission from the agency.

General Overview

InfoAdvantage uses a Web-based reporting tool to create simple and complex reports. Along with the delivered reports, *infoAdvantage* includes advanced functionality to facilitate ease of building and editing custom queries as well as manipulating the report layout, data display, and presentation of a custom report. It also provides drill down capabilities for in-depth analysis following creation.

InfoAdvantage is accessed through the eMARS application. Depending on your security rights, you may interact with the reports in *Public Folders* or edit and build your own documents.

InfoAdvantage Universes point to data warehouse tables that are updated each night using an *Extract, Transform & Load* (ETL) process. The data warehouse reflects data from the previous business day, which is loaded to the data warehouse during the *eMARS Nightly Cycle*.



It is important to note that users should always check the *eMARS* *News & Alerts* Web site @ http://mars.ky.gov/alerts/marsnewsalerts.htm each morning to verify the ETL process has completed and that the data warehouse is ready for reporting. Usually, if the ETL process has not completed, you will not be able to access *infoAdvantage*. However, the possibility exists for an exception to occur and *infoAdvantage* may be accessible even if the data warehouse has not been completely updated.

Chapter 1: Getting Started

Opening infoAdvantage

1. Log into eMARS

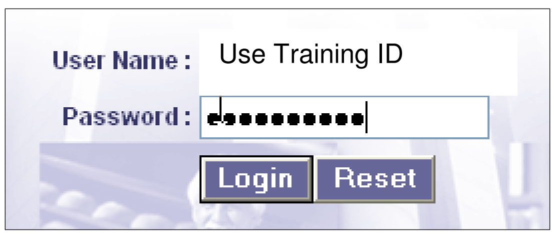
a. To open eMARS, use the URL http://emars.ky.gov.

Note: SSL/VPN users will have a different log on @ https://sslvpn.ky.gov. However, each agency using SSL/VPN may be set up differently. The user may have an eMARS icon on their desktop. SSL/VPN users should verify this with their tech support.

b. Normally, you would log into eMARS using your own ***User Name*** and ***Password.***

For the purpose of this training class, you will log in using the **Training** *User Name* and *Password* your instructor provides for you at the start of class.

c. Click on ***Login.***

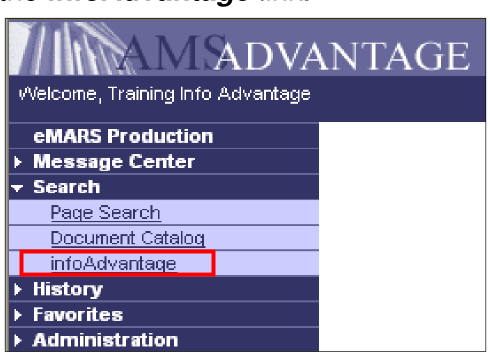


CAUTION*:* If your attempt to login fails on a number of consecutive occasions, you will lock out your account. You only have three (3) tries. If you lock out your ID, you will need to e-mail the Customer Resource Center @ Finance.CRCGroup@ky.gov to have the password reset.

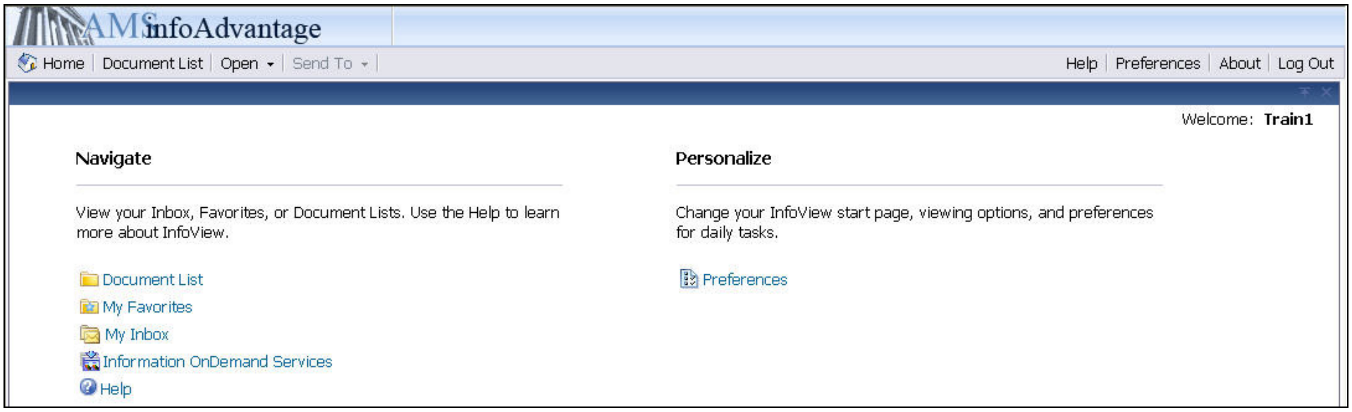
2. Open infoAdvantage

a. When the eMARS home page comes up, click on ***Search*** located in the **Secondary Navigation Panel**.

b. Click on the ***infoAdvantage*** link.

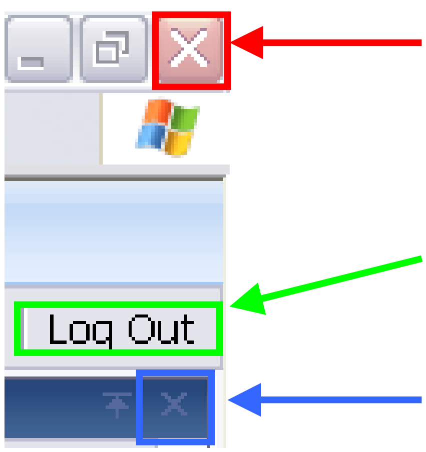


After completing the steps on the previous page, the *infoAdvantage Home* page should appear.



Logging Out of infoAdvantage

When you are ready to exit infoAdvantage, you should always use the *Log Out* option. This will ensure that you have completely logged out of your session.



Do not use this "X" to close your infoAdvantage session. If you click this "X" when exiting from infoAdvantage, you leave a session open. Leaving a session open when not in use, could cause performance issues if multiple users are exiting from infoAdvantage this way. ONLY USE THE RED "X" IF NO OTHER OPTION TO LOG OUT EXISTS.

To properly exit an infoAdvantage session, you should click on Logout and completely log out before closing the Internet screen.

To close a report, you should click on the "X" shown here. This will exit you from your current screen.

Note: the blue "X" is hard to see but it is located on the top right side of the screen under *LOG OUT*.

After you click *Logout*, another screen may appear that prompts you to log into InfoView. This option is not available and you should close that screen. In some instances, you will be taken directly back to your eMARS session. You will then have to logout of eMARS, if desired.

Note: Before you Logout of infoView make sure you click the Blue "X" to close your report.

Chapter 2: Creating Documents

Selecting a Data Provider (Universe)

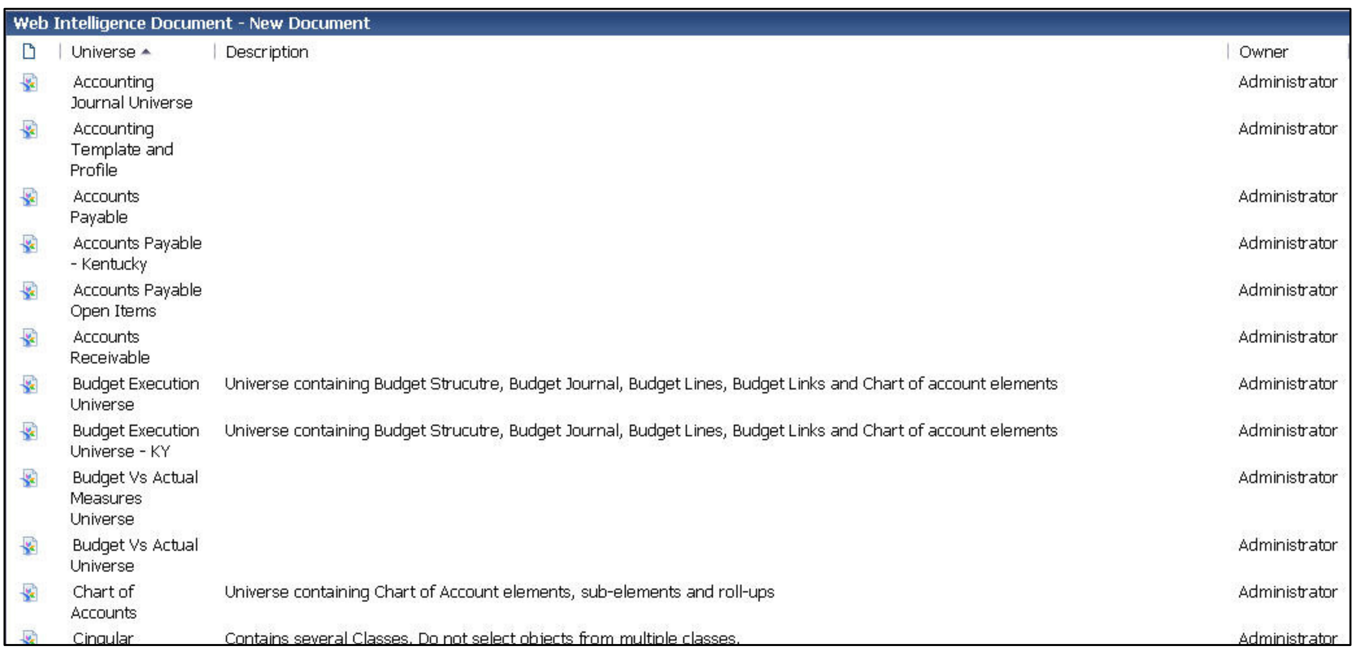
In addition to running reports in infoAdvantage, users have the option of creating reports.

3. Click **Document List.**

4. Click on **My Favorites** folder.

5. Click **New > Web Intelligence Document** on the *Home Panel Toolbar* in infoAdvantage.

   A list of *Universes* will appear. From this list, you will select the *Universe* you want to use to build your report (the below screen shot only shows a portion of what is available).



Web Intelligence Document - New Document

Universe	Description	Owner
Accounting Journal Universe		Administrator
Accounting Template and Profile		Administrator
Accounts Payable		Administrator
Accounts Payable - Kentucky		Administrator
Accounts Payable Open Items		Administrator
Accounts Receivable		Administrator
Budget Execution Universe	Universe containing Budget Strucutre, Budget Journal, Budget Lines, Budget Links and Chart of account elements	Administrator
Budget Execution Universe - KY	Universe containing Budget Strucutre, Budget Journal, Budget Lines, Budget Links and Chart of account elements	Administrator
Budget Vs Actual Measures Universe		Administrator
Budget Vs Actual Universe		Administrator
Chart of Accounts	Universe containing Chart of Account elements, sub-elements and roll-ups	Administrator
Cingular	Contains several Classes. Do not select objects from multiple classes.	Administrator

6. **Scroll** down and locate the *General Accounting Universe*.

7. **Click** on the *General Accounting Universe*.

   After clicking on the *General Accounting Universe*, the *Query Panel* comes up.

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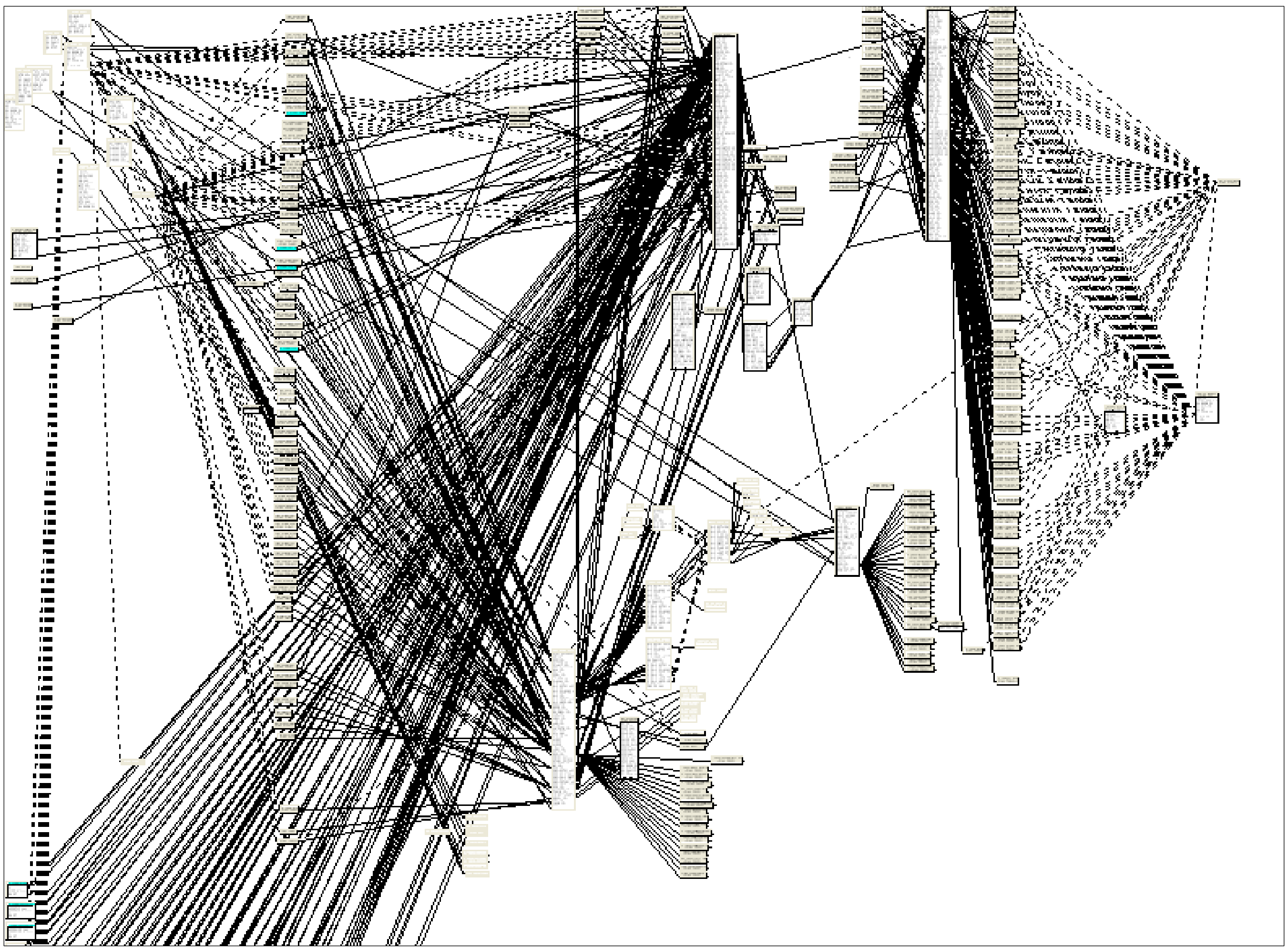
Chapter 3: Universes

What is a Universe

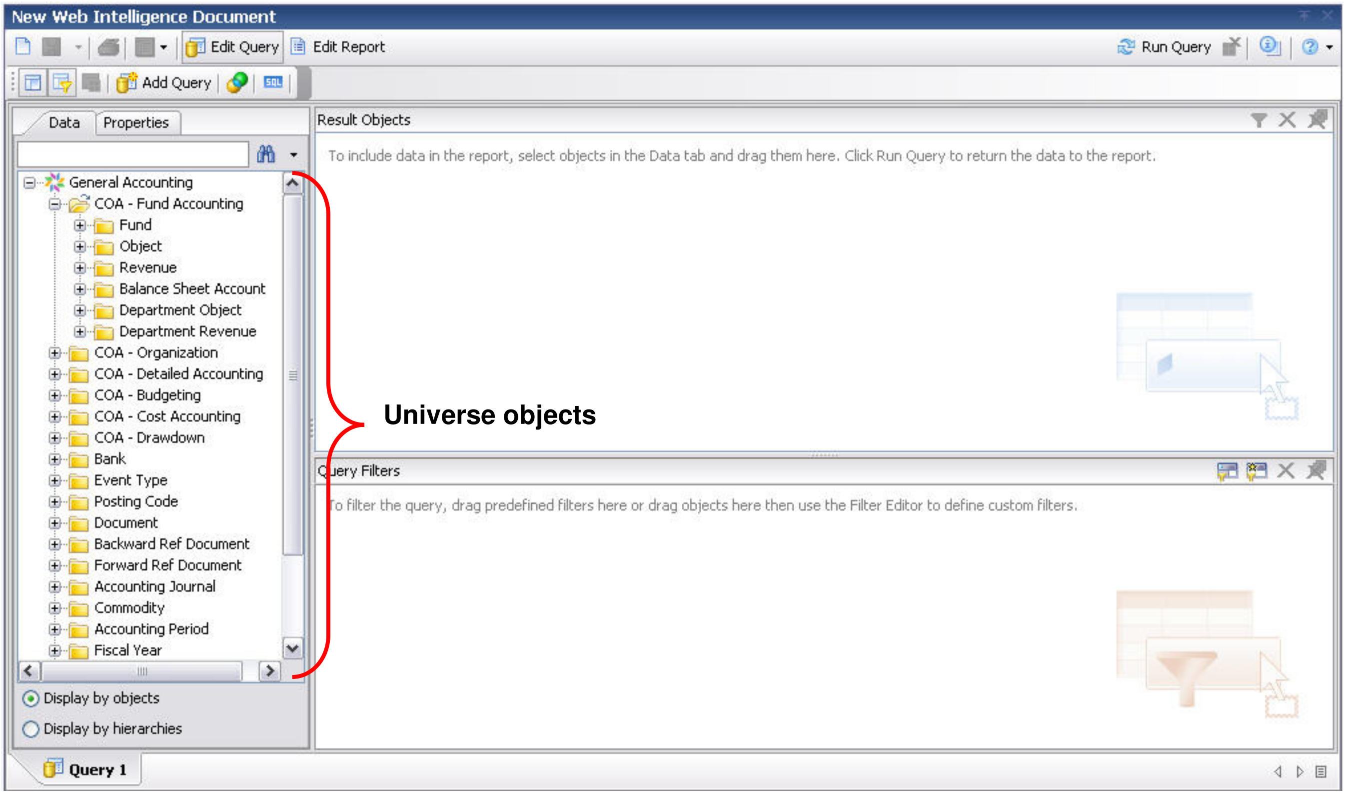
A *Universe* is a database interface that maps objects to fields in a database or a grouping of tables. It provides an easy to use interface for users to run queries against a database to create reports and perform data analysis.

The *Universe* simplifies the report creation process by eliminating the need to know the database structure or be a relational database expert. It also provides automatic joins between database tables.

Below is an example of a Universe with all the tables joined together. The multiple boxes represent tables and the lines are joins between the tables. See **Appendix L Primary Verses Kernel Universes**



After selecting a universe from the *New Web Intelligence Document* on the *Home Panel Toolbar*, the universe appears in the *Query Panel* to the left of the *Result Objects* and *Query Filters* panes.



Classes and Objects

A universe is a collection of *objects*. Related objects are grouped into *classes*. Objects represent fields in a database table. The object names will be everyday terms instead of the cryptic field names in a database.

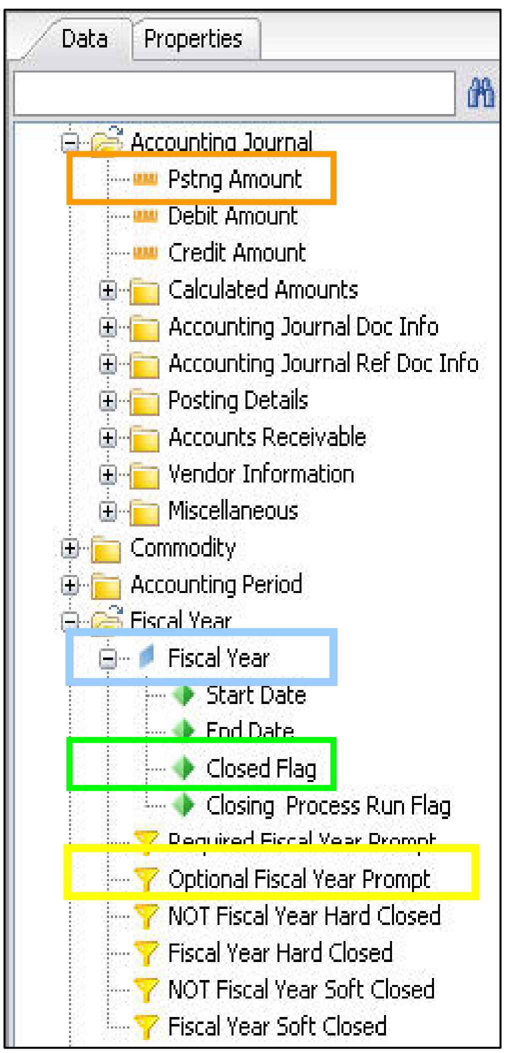
Classes (Folders)

Classes are logical groupings of objects that make objects easier to find. For example, all address fields might be grouped together in one class.

Universe Objects

There are four different types of *Universe Objects*: *Dimension, Detail*, *Measure* and *Predefined Filter*.

*Different types of universe objec*ts



Dimension Objects ( )—Blue Diamond

These objects are either text or dates, such as *Fiscal Year* and *Document Record Date*. *Dimension Objects* represent the basic structure of the data.

Detail Objects ( )—Green Pyramid

Always associated with a *Dimension Object* and provides additional descriptive data about the *Dimension*. *Detail Objects* such as *Start Date*, *End Date* and *Closed Flag* are objects that could be related to a *Fiscal Year Dimension*.

Measure Objects ( )—Orange Ruler

Always represents numeric data that is the result of calculations on data in the database. A *Measure Object's* value changes depending on the context of the report. For example, the *Pstng Amount* will differ depending on the *Closing Classification*, *Posting Code* or if the report is for one *Accounting Period* or multiple periods.

Predefined Filter ( )—Yellow Funnel

Predefined Filters are time savers that are created by a *Universe Designer*. They are created for conditions that are complicated and/or commonly used. An example of a predefined filter is *Required Fiscal Year Prompt*.

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Chapter 4: Creating a Report

Building a Query

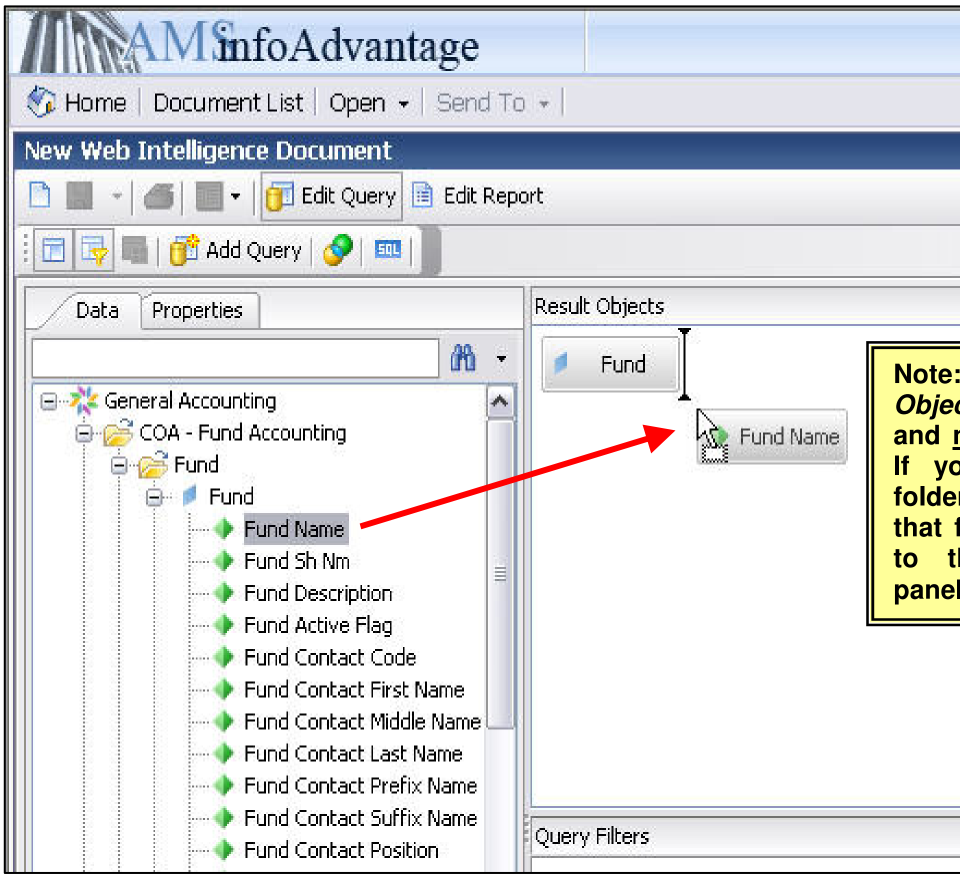
Query Panel (also referred to as the Data Provider)

The *Query Panel* displays all of the objects available in a universe. When the query is ready to be built, select the *Dimension* and *Detail Objects* from the universe that represents the information you want to retrieve, and drag them to the *Result Objects* panel. Add *Measure Objects* that represent the calculation, or the action you want to perform on the information.

For a review of *Query Panel* toolbars, see ***Appendix A***.

Simple Query

To build a query, simply find the object you want on your report and drag it to the *Result Objects Panel*.



Note: Be sure to drag *Objects* onto your report and <u>not the entire folder</u>. If you drag the entire folder, all the objects in that folder will be moved to the *Result Objects* panel.

8. Locate and drag ***Fund*** and ***Fund Name*** under the *COA – Fund Accounting Class* to the *Result Objects Panel,* but **<u>do not</u> run the query yet.**

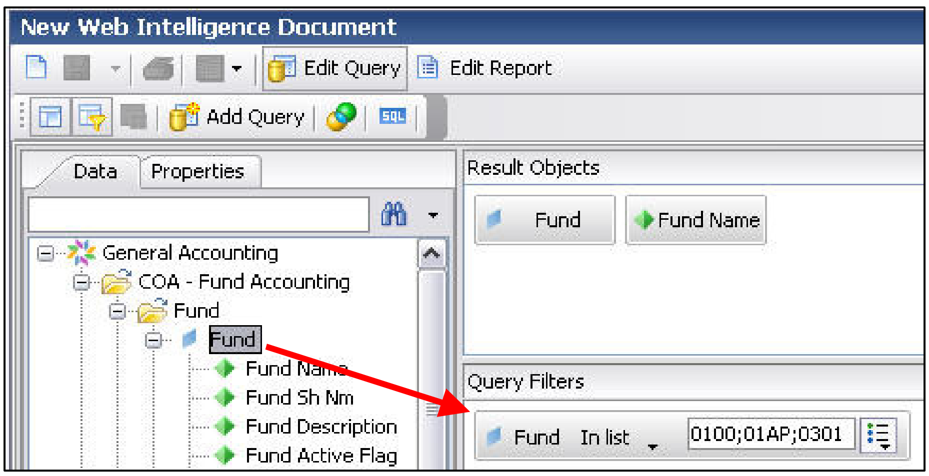
Note: When you drag a Detail object into the Results Objects panel it will automatically bring over the Dimension associated with the Detail (i.e. dragging Fund Name first will automatically pull the Fund in with it.)

Caution: When dragging objects into the *Result Objects* panel, it is easy to accidentally drag an entire *Folder* instead of the *Dimension, Detail* or *Measure Object.* When this happens, every object within the *Folder* will be included in the *Result Objects* panel. You have several options for correcting this error.

- Start over by clicking on the C*reate New Document* icon.
- Drag each object out of the *Results Object* panel, one object at a time.
- Delete unwanted objects, to do this right-click on the last object in the *Result Objects* panel then hold down the *Delete* button until all unwanted objects have been removed.

Before running the query, we will go ahead and set up some conditions.

9. Drag ***Fund*** into the *Query Filters Panel*.



Query Filters
Query Filters allow you to edit a filter on an object in a query. There are four sections to consider Filtered *Object, Operator, Operand Type and Value(s) Selected.*

Filtered Object	Shows which object you are applying a condition to or filtering.
Operator	Tells infoAdvantage how to evaluate the object (*Equal To, Different From, Greater Than, Is Null, etc…)*
Operand Type	Allows you to choose to type in a *Constant*, pick a *Value(s) from list*, or create a *Prompt*.
Value(s) Selected	Shows the value(s) that you either typed or selected for evaluation. If a prompt is used instead, you will see *Prompt Text*, and you will have other options to choose from when creating your prompt.

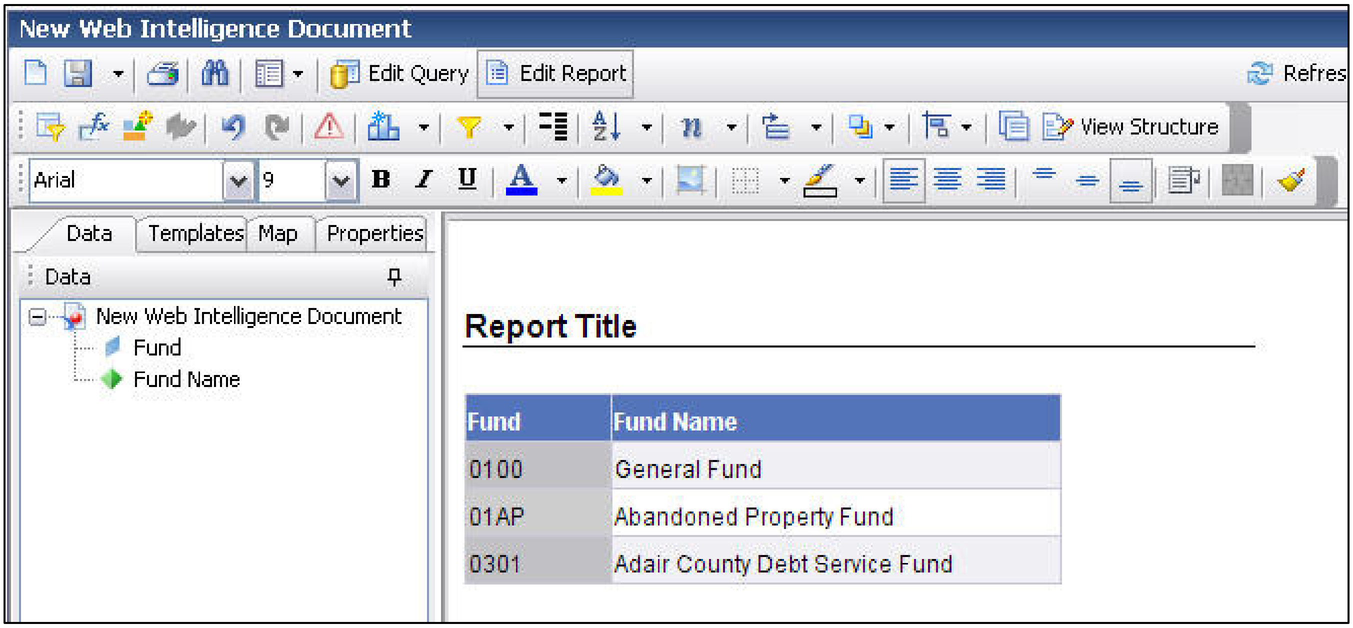
10. Choose ***InList***. Click the button at the end of the condition and select ***Value(s) from list***. Choose *Funds* **0100, 01AP, 0301**, then click **OK**.

11. Click on ***Run Query*** to create the report once you have the objects and conditions that you need.

Report Panel

After clicking on *Run Query* on the *Query Panel Toolbar*, you should have something similar to the figure shown below. If you notice, the report contains the objects we moved into the *Result Objects Panel*. As well, the report only returned *Funds* that we selected in the *Query Filters Panel* (0100, 01AP, 0301).

For a review of *Report Panel* toolbars, see ***Appendix B***.



Editing a Query

To add, delete objects or modify conditions in your query, you would:

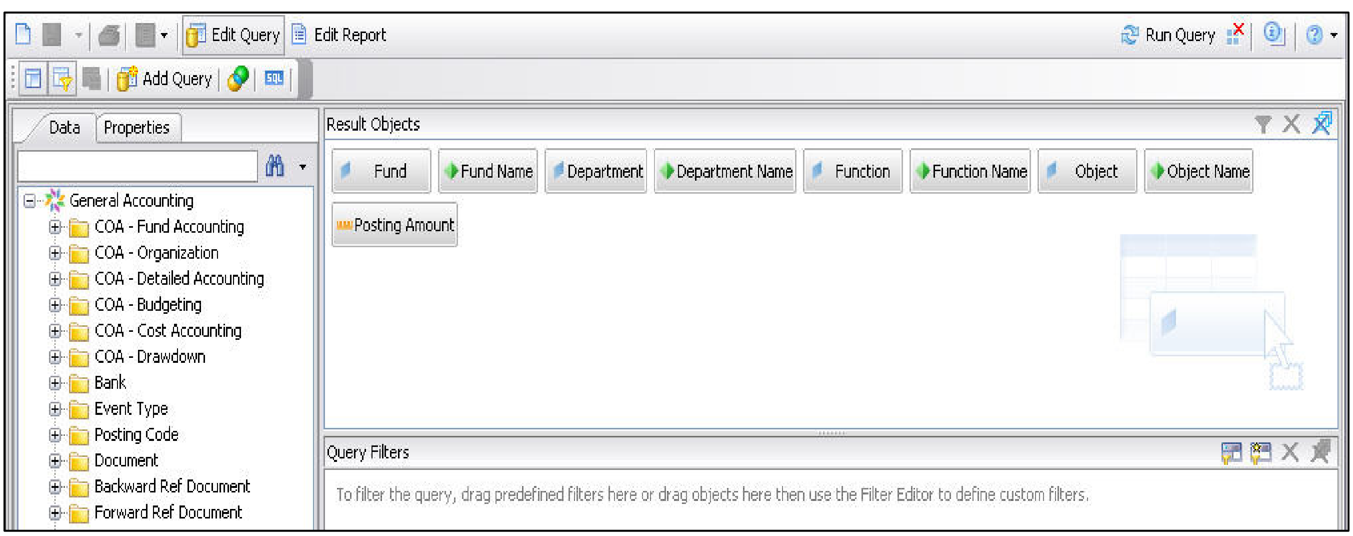
12. Click the ***Edit Query*** button.

Let's edit the query to include objects that we could use in an *Expenditure Analysis Report.*

13. Remove the condition on ***Fund*** by both clicking on the condition and pressing the *Delete* key, or by dragging the condition to the *Data Manager Panel* on the left, or by right clicking on the condition and selecting *Remove*.

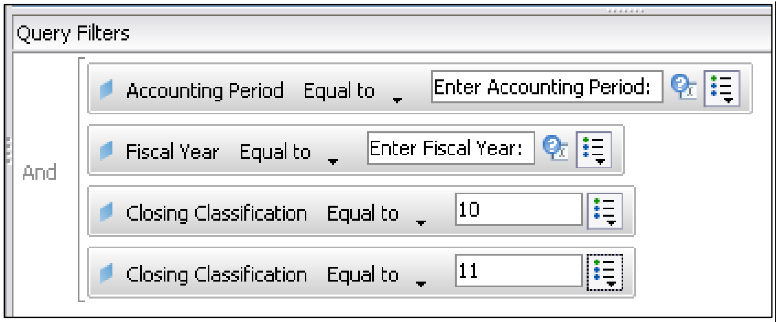
14. Drag the following objects into the *Result Objects Panel*:

- COA-Fund Accounting > Fund > ***Fund***
- COA-Fund Accounting > Fund > Fund > ***Fund Name***
- COA-Organization > Organization-Centralized View > ***Department***
- COA-Organization > Organization-Centralized View > Department > ***Department Name***
- COA-Detailed Accounting > Function > ***Function***
- COA-Detailed Accounting > Function > Function > ***Function Name***
- COA-Fund Accounting > Object > ***Object***
- COA-Fund Accounting > Object > Object > ***Object Name***
- Detailed Accounting Ledger > ***Posting Amount***



Note: See *Appendix C—Accounting Journal verses Summary Ledgers* for explanation of when to use *Accounting Journal* or *Basic/Detail Accounting Ledger*.

15. Let's go ahead and add the following additional conditions shown in the screenshot below to our query before running it again.



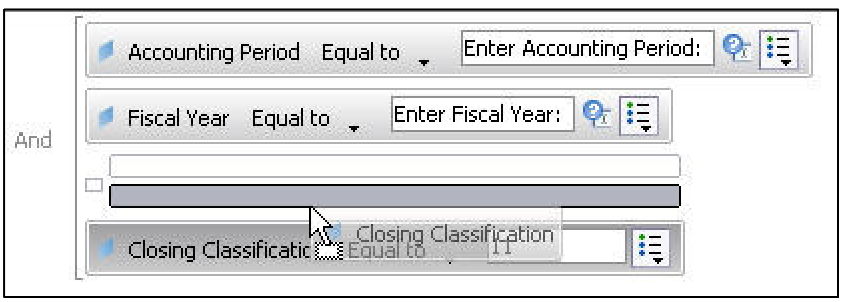
Note: Closing Classification is found under the Posting Code class (folder.)

For a list of *Closing Classifications*, see *Appendix D.*

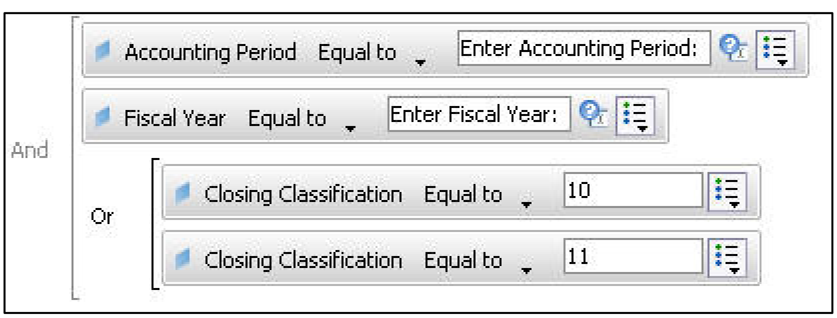
***Closing Classification* is important because it tells your report what posting amounts to pull.**

If we leave our conditions as is shown in the screenshot above, our report will not return any data. This is because we are telling the query to return data where the *Closing Classification* on the *Fund* is both *Accrued* **AND** *Cash Expenditure.* Because of the way data is returned, row by row, you will never return a row that is equal to both at the same time. Therefore, we need to make our condition say equal to one ***OR*** the other. To do this, we must first group the *Closing Classification Conditions* together.

16. Drag *Closing Classification Equal to: 11* on top of *Closing Classification Equal to: 10* as such:



Notice as you drag *Closing Classification Equal to: 11* on top of *Closing Classification Equal to: 10* a diagram of two boxes appears, as shown in the screenshot above. The shaded box represents the location where the condition you are moving will be placed.



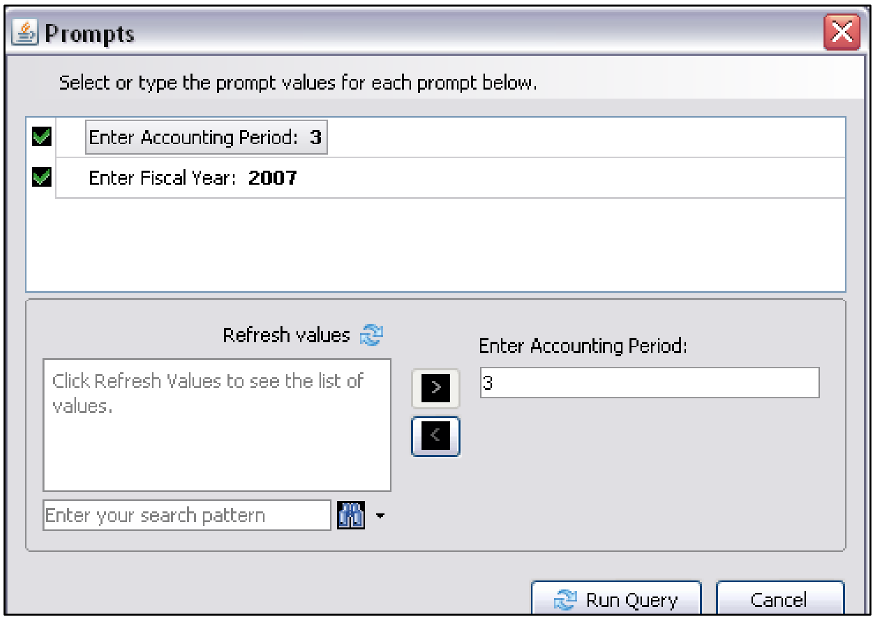
Moving the condition in this manner results in grouping the *Closing Classification Conditions* together and the statement now says we will return everything equal to *Closing Classification Equal to: 10* ***OR*** equal to *Closing Classification Equal to: 11.*

17. Double click the **And** to change it to an **OR**

18. Click ***Run Query***.

19. Click on "*Enter Accounting Period*:" and enter **3.**

20. Click on "*Enter Fiscal Year*:" and enter **2007**.



21. Click **Run Query**.

Your results should be similar to those below. Keep in mind that different users may run the same report and get different results returned. This is due to the security assigned to each user and some users have access to see information in areas to which others may not have access. If a user tries to retrieve data that he does not have access to, nothing will be returned in the report.

Fund	Fund Name	Department	Department Name	Function	Function Name	Object	Object Name	Posting Amount
0100	General Fund	785	Facilities & Suppor	DFCX	FIN FSS Commiss	E111	Regular Salaries A	1,983.63
0100	General Fund	785	Facilities & Suppor	DFCX	FIN FSS Commiss	E121	Employers Fica	143.47
0100	General Fund	785	Facilities & Suppor	DFCX	FIN FSS Commiss	E122	Emp Ret-Inc Paym	153.73
0100	General Fund	785	Facilities & Suppor	DFCX	FIN FSS Commiss	E321	Office Supplies	221.95
0100	General Fund	785	Facilities & Suppor	DFCX	FIN FSS Commiss	E326	Household And Kit	-184.1
0100	General Fund	785	Facilities & Suppor	DFCX	FIN FSS Commiss	E399	Other	-155
0100	General Fund	785	Facilities & Suppor	DFEX	FIN FSS Engineer	E111	Regular Salaries A	241,216.25
0100	General Fund	785	Facilities & Suppor	DFEX	FIN FSS Engineer	E121	Employers Fica	16,798.32
0100	General Fund	785	Facilities & Suppor	DFEX	FIN FSS Engineer	E122	Emp Ret-Inc Paym	18,694.29

Note: Once a query has been run, if the query is edited, infoAdvantage will not add new objects to the report that may have been added to the query. The user must drag added objects onto the existing report before they will show up on the report. Hold down the *Ctrl* key to select multiple objects to drag new objects into your report.

22. Save the report in *My Favorites* as "***Training-Your Name***"

23. Close the *Report Panel* but **do not close or log out of infoAdvantage.**

Exercise 1: Create a Custom Report

Review

1. What is a *Universe*?

2. Name the three *Universe Object Types*.
   1) (*Blue Diamond*) ____________________
   2) (*Green Pyramid*) ____________________
   3) *(Orange Ruler)* ____________________

3. Classes are ____________ of objects to make the objects easier to find.

4. ***True or False*** To build a query, simply find the object you want to include on your report and drag it to the *Query Filters Panel.*

5. When should you use the *Summary Ledgers* (*Basic/Detail Accounting Ledger*) instead of the *Accounting Journal* to pull *Posting Amount*?

6. Why are *Prompt Filters* important?

Hands-On Instructions

Task Overview

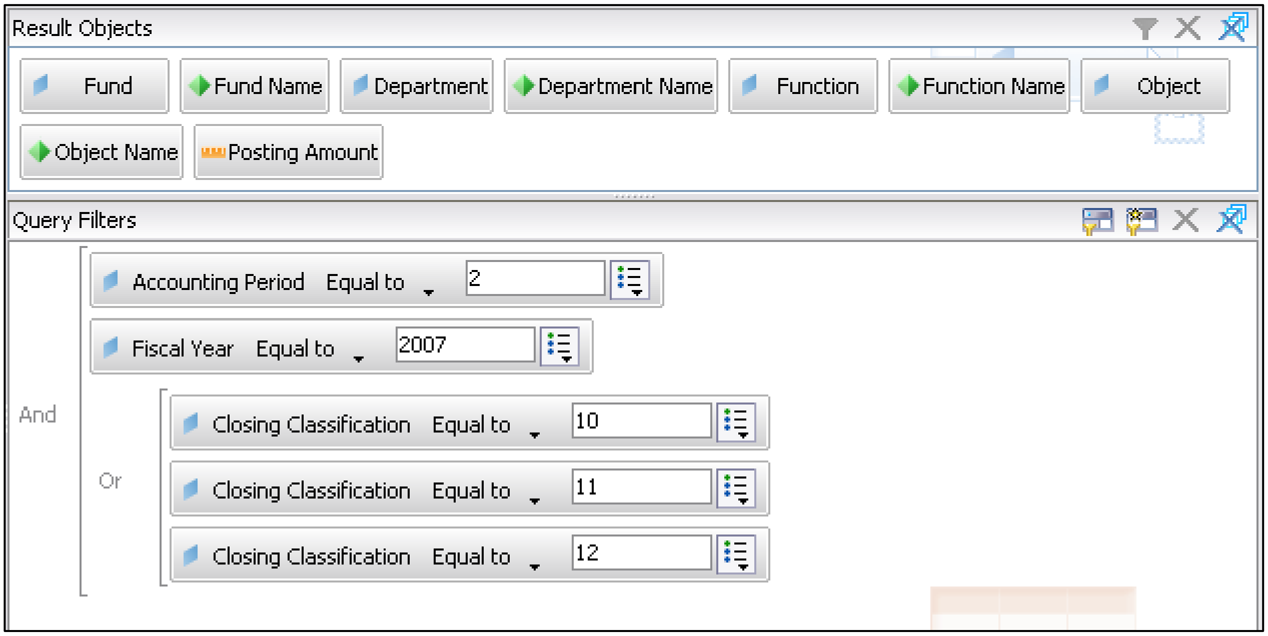
Use the **General Accounting** universe to create a report containing *Expenditures* and *Encumbrances.*

1. Click **My Favorites** > **New > Web Intelligence Document** on the InfoAdvantage *Home Panel Toolbar*.
2. Click **General Accounting** from the list of universes. The *Query Panel* opens in the *Workspace Panel*.
3. Drag the following **Objects** to the *Result Objects* panel: *Fund, Fund Name, Department, Department Name, Function, Function Name, Object,* and *Object Name.*
4. Drag *Posting Amount* (*Detailed Accounting Ledger*) measure object to the ***Result Objects*** panel.
5. Drag *Accounting Period* into the ***Query Filters*** panel and set it equal to **2.**
6. Drag *Fiscal Year* from the *Accounting Period Class* into the ***Query Filters*** panel and set it equal to **2007.**
7. Drag *Closing Classification* into the ***Query Filters*** panel and set it equal to **10.**

8. Add a second and a third *Closing Classification* to the ***Query Filters*** panel and set them equal to **11** and **12**.

   *Be sure your condition for the Closing Classifications is **OR**.*

9. Use the below screenshot as a guide to verify that your query is correct.



10. Click the ***Run Query*** button. The query will run and return a report.

    Below is an example of the returned report after the "*Run Query*" button has been clicked:

Fund	Fund Name	Department	Department Name	Function	Function Name	Object	Object Name	Posting Amount
0100	General Fund	785	Facilities & Support	DFCX	FIN FSS Commissioners Ofc	E326	Household And Kitc	184.1
0100	General Fund	785	Facilities & Support	DFCX	FIN FSS Commissioners Ofc	E399	Other	155
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E111	Regular Salaries Ar	260,721.55
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E112	Seasonal Salaries .	955.07
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E121	Employers Fica	18,269.24
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E122	Emp Ret-Inc Paymt	19,388.67
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E123	Employers Health I	21,976.03
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E124	Employers Life Insu	89.28
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E224	Copy Machine Rent	557.86
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E226	Carpool Rental-St A	629.21
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E243	Oth Parcel Dlvry Srv	238.86
0100	General Fund	785	Facilities & Support	DFEX	FIN FSS Engineer & Contract.	E252	Printing Paid To Ve	290

11. Save the report in *My Favorites* as "**Exercise 1 – Your Name**".

Chapter 5: Sections & Breaks

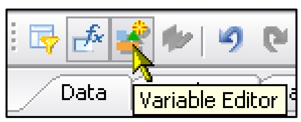
Sections

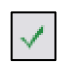
Adding sections to group data on reports or breaks to group data on tables, helps organize reports. To make reports easy to navigate, you can divide the report into sections that group related data together. The tables in a section only display the data relevant to the *Dimension Object* on which the section is created. For example, sections created based on *Fund* will separate the data into different groups for each *Fund* listed in the report.

To create a section, select the desired data object you want to group from either the table or from the *Report Manager – Data* tab; drag and drop the data object above the table you are creating the section on.

Before we create our sections, we need to create several *Label Dimension Variables* (these labels will combine a Dimension and a Detail into one Object separated by a hyphen (i.e. Fund – Fund Name) that will assist in formatting and provides more information shown under the Map Tab. To create a label we will use the *Variable Editor*, which will be covered in depth in Chapter 6.

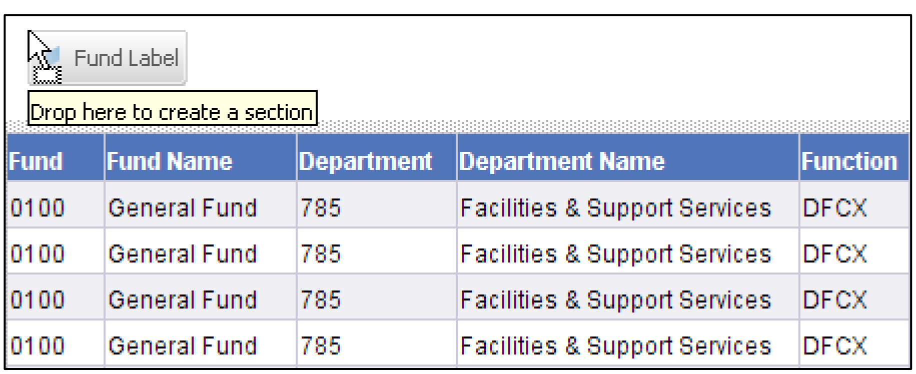
1. Under *My Favorites* locate and open in *Edit* mode the ***Training – Your Name*** report.
2. Activate the ***Variable Editor***.



3. In the *Variable Editor*
    - **a.** Name your *Variable:* ***Fund Label***
    - **b.** Choose the correct *Qualification:* ***Dimension***
    - **c.** Create the *Formula:* ***=[Fund]+" - "+[Fund Name]***
    - **d.** Click the **green check** mark to validate your formula 
    - **e.** Click **OK** if no formula errors exist.
4. Create Labels for ***Department – Department Name, Function – Function Name***, and ***Object – Object Name***.

    The labels you just created will now appear under the *Data* tab within the *Workspace Panel*.

5. Drag the ***Fund Label*** above the table until you see the message text "*Drop here to create a section*".



Fund	Fund Name	Department	Department Name	Function
0100	General Fund	785	Facilities & Support Services	DFCX
0100	General Fund	785	Facilities & Support Services	DFCX
0100	General Fund	785	Facilities & Support Services	DFCX
0100	General Fund	785	Facilities & Support Services	DFCX

The report is sectioned off for each value of the selected *Dimension Object* (*Fund*). In the example below, you will notice there are three sections: *Fund C07U, Fund C08B and Fund C21Q.*

C07U - Chiller Repair-TCUP

Fund	Fund Name	Department	Department Name	Function	Function Name	Object
C07U	Chiller Repair-TC	785	Facilities & Support Services			E703

C08B - Relocate Landscape Branch

Fund	Fund Name	Department	Department Name	Function	Function Name	Object
C08B	Relocate Landsc	785	Facilities & Support Services			E701

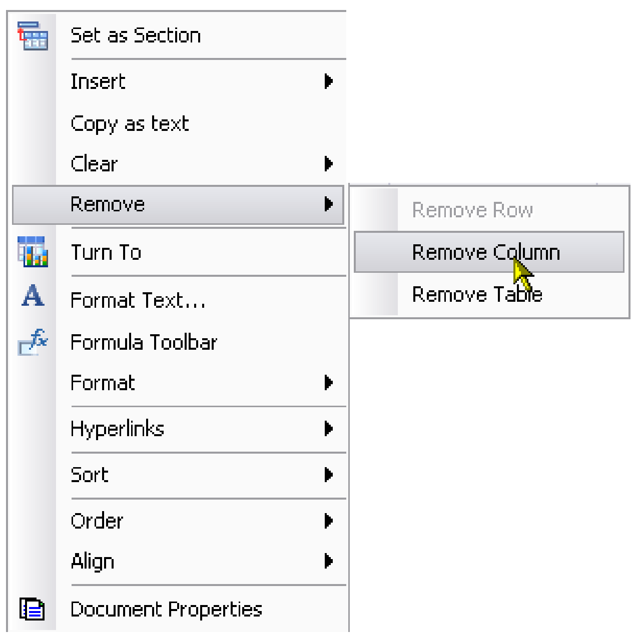
C21Q - Capitol Restoration-Design

Fund	Fund Name	Department	Department Name	Function	Function Name	Object
C21Q	Capitol Restorati	785	Facilities & Support Services			E701

6. Delete ***Fund, Fund Name, Department, Department Name, Function,*** and ***Function Name*** from the report. You do this by right - clicking on the object select ***Remove > Remove Column.***

   You may select more than one column at a time to delete by holding Ctrl key down.

   Another option for removing an object from a table is to click on an object, drag it from the table, and drop it in the *Report Manager.*



7. Create a section on ***Function Label*** by dragging the object from the Report Manager. (You may have to drag your table down to make room for the new section.)

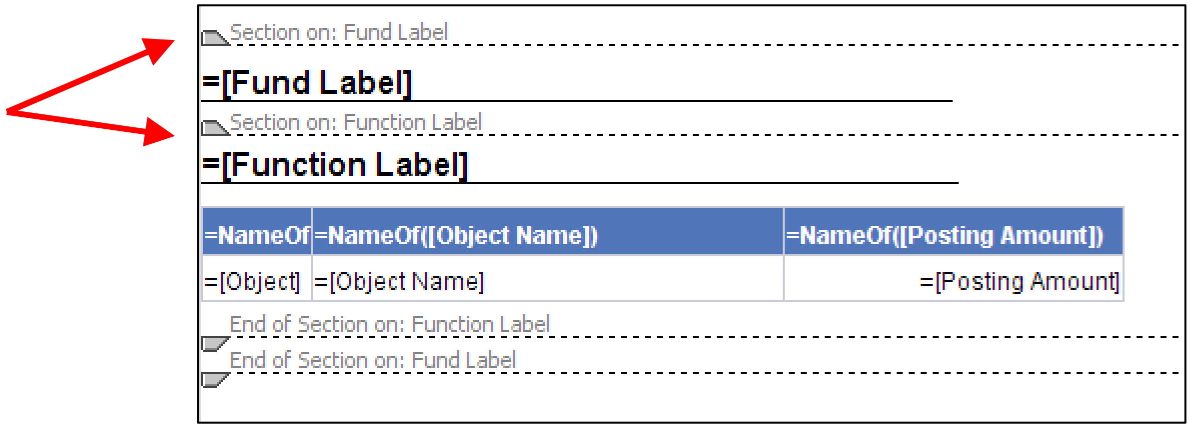
0100 - General Fund

DFCX - FIN FSS Commissioners Ofc

Fund	Fund Name	Department	Department
0100	General Fund	785	Facilities &
0100	General Fund	785	Facilities &
0100	General Fund	785	Facilities &
0100	General Fund	785	Facilities &
0100	General Fund	785	Facilities &
0100	General Fund	785	Facilities &

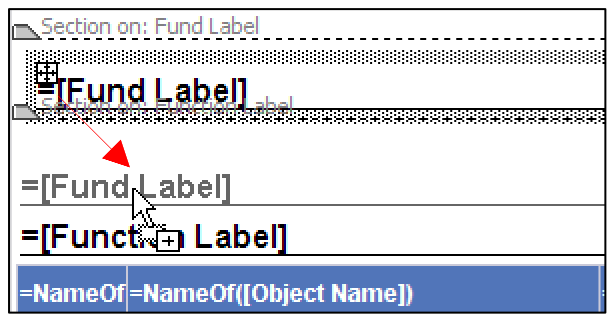
If we look at the report in 

View Structure we will see the layout of the sections.



Another option we have with sections is to move all objects down to the lowest level of the report, which is the section where the table is located. This will allow us to reduce unnecessary whitespace in our report.

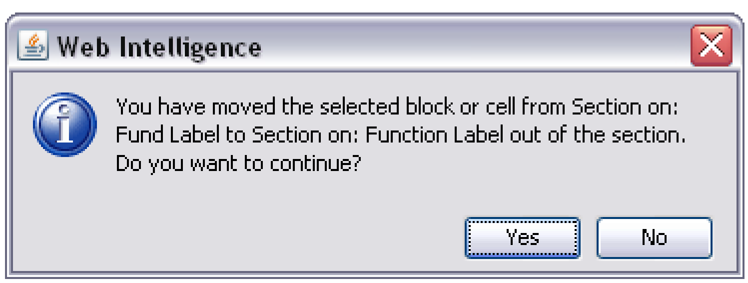
To do this, you simply click on an object of a section and move it down to the lowest section.



8. Move all *Section Cells* down to the lowest section level.

When you do this, you will receive a message asking you if you really want to move the cell from the section.

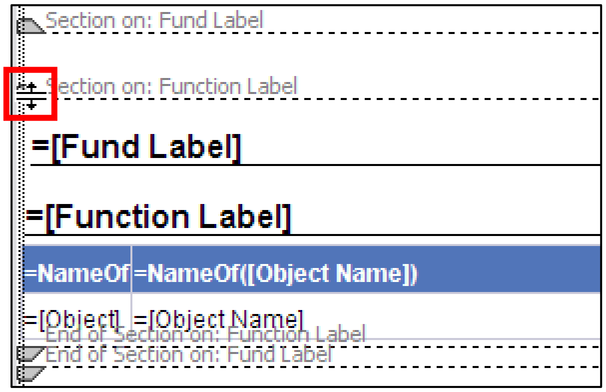
9. Click ***Yes.***



After you move the objects into the lowest level section (*Function Label Section* in this example), you can move the empty sections closer together to remove unneeded space.

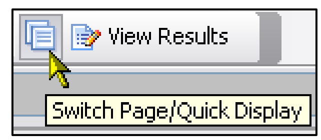
Note: When removing unneeded space in sections be sure to start with the first section break and work your way down.

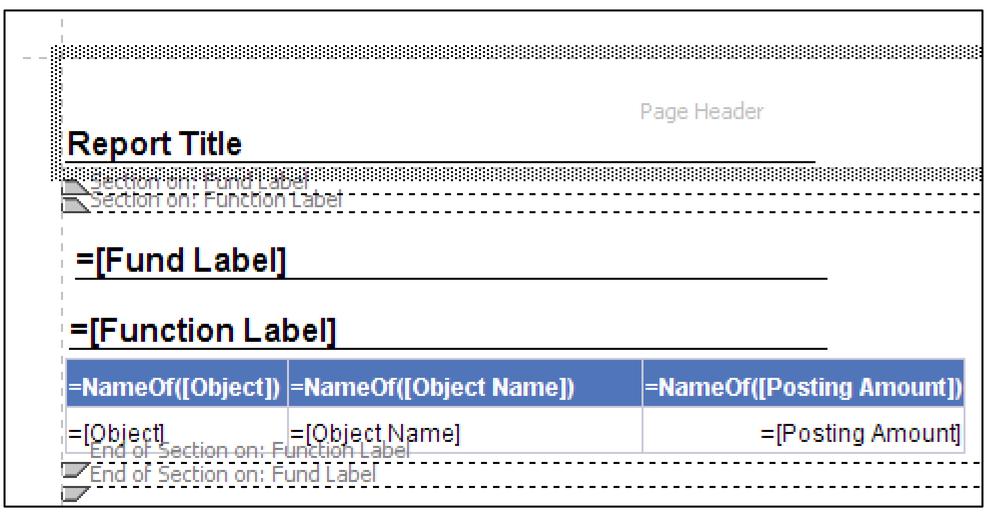
In the example to the right you would begin with reducing space in the top *Section* first which in this case is *Fund Label Section.*



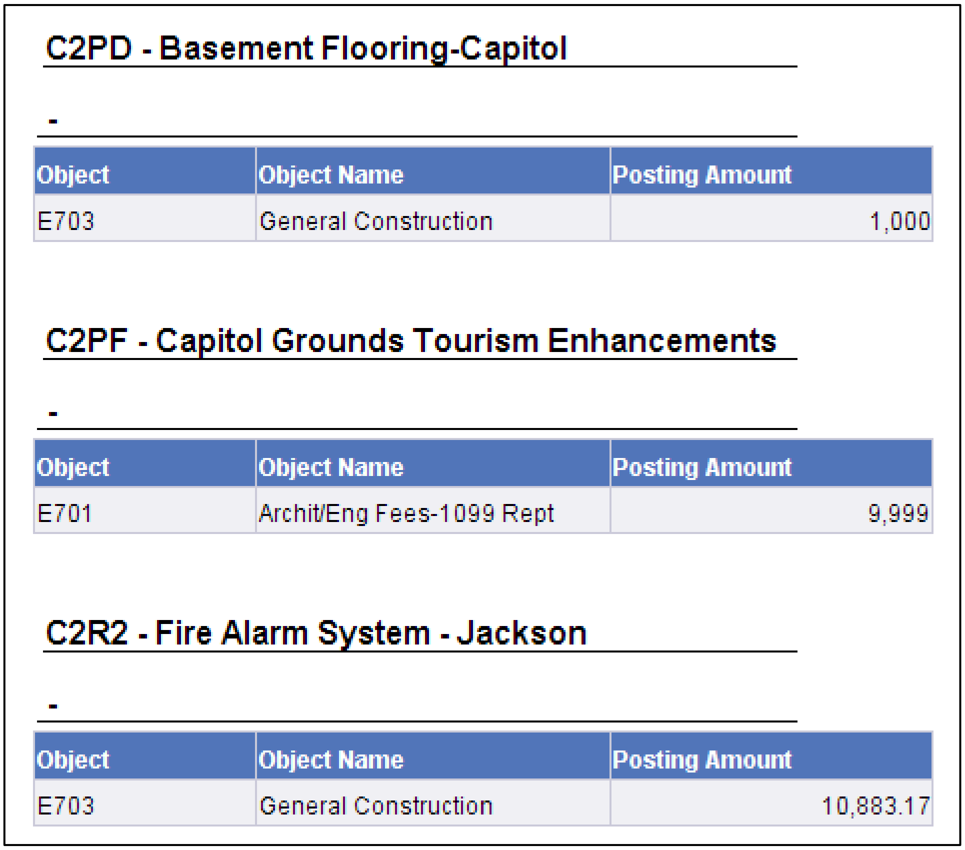
The figure below shows all sections overlapped so all wasted space is removed. Also, the *Report Title* has been moved into the *Page Header*.

10. Click on the *Switch Page/Quick Display* icon so you may see the page layout margins.)





The following screen print shows an example of the report after sections have been applied and formatted.



C2PD - Basement Flooring-Capitol

-

Object	Object Name	Posting Amount
E703	General Construction	1,000

C2PF - Capitol Grounds Tourism Enhancements

-

Object	Object Name	Posting Amount
E701	Archit/Eng Fees-1099 Rept	9,999

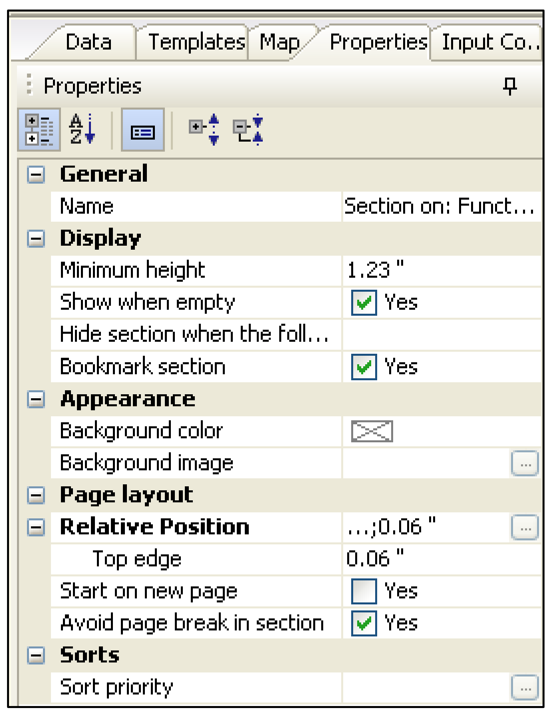
C2R2 - Fire Alarm System - Jackson

-

Object	Object Name	Posting Amount
E703	General Construction	10,883.17

11. Click 

12. Click on a section to access the Section properties



Your options under *Section Properties* are:

- *General*
- *Display*
- *Appearance*
- *Page Layout*
    - *Relative Position*
- *Sorts*

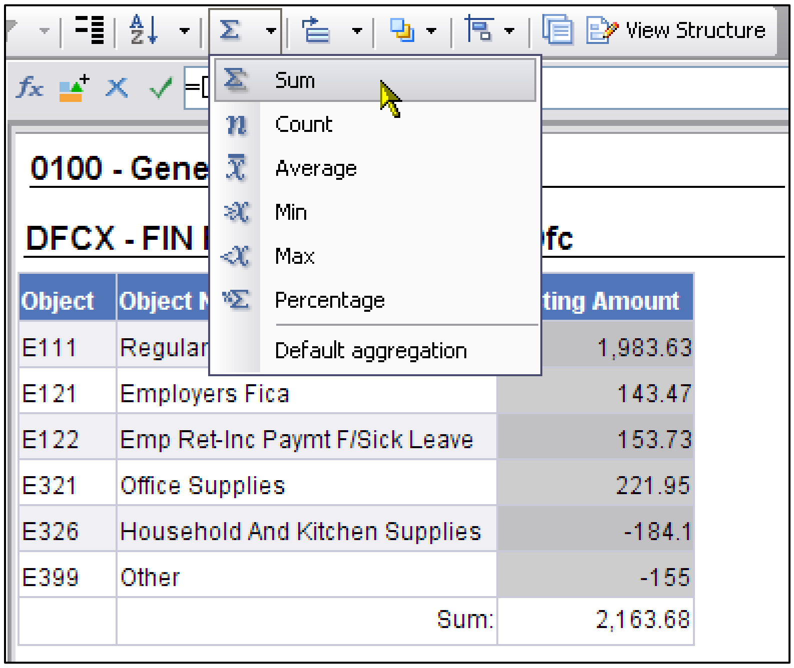
All of the property options will apply to the Section that you clicked on.

To apply a total to your sections, you simply:

13. Click View Results

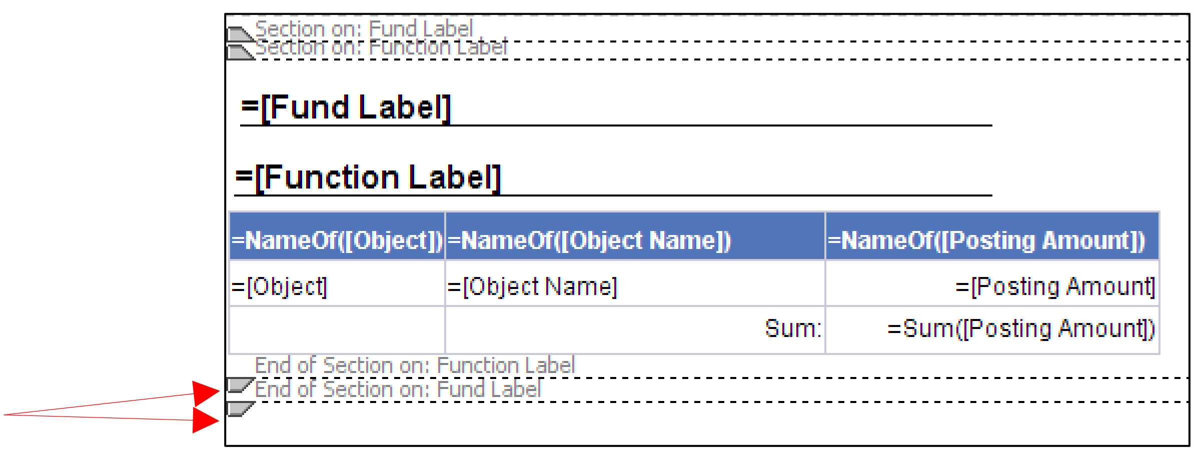
14. Click on the ***Posting Amount*** measure field in your report

15. Select ***Sum*** from the *Insert Sum* menu option. This will apply a sum to all sections.



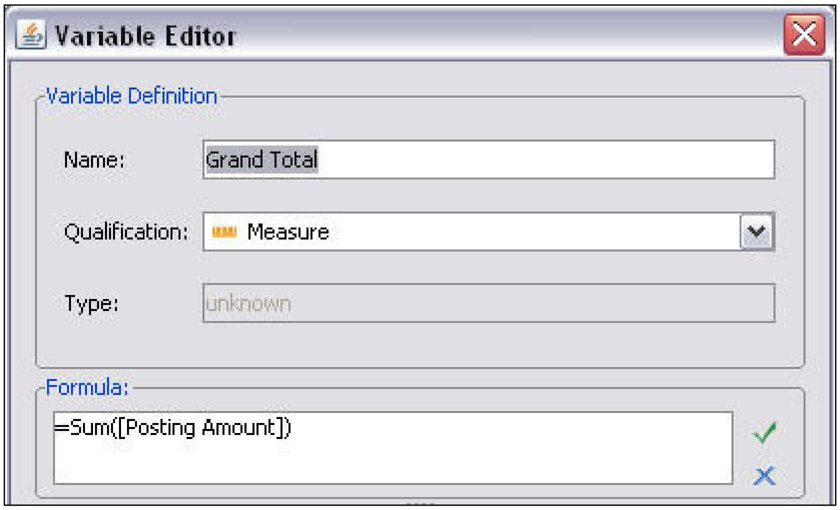
Grand Totals

In your report, you may show a grand total for each section in each section's footer (*End of Section*). In addition, you may show a grand total for the entire report, which would give you the department total.



For grand totals, you will first need to use the Variable Editor to create a variable as shown below.

16. Click the Variable Editor icon.



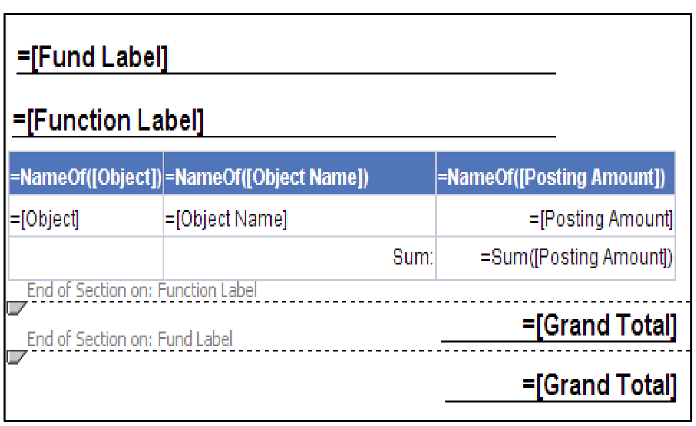
17. Complete the following in the Variable Definition

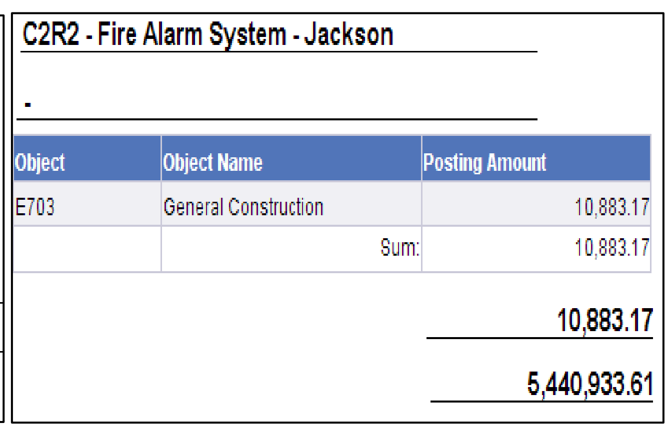
- **a.** Name: **Grand Total**
- **b.** Qualification: **Measure**
- **c.** Formula: **=Sum([Posting Amount])**

18. Click the **green check** mark to validate your formula

19. Click ***OK*** if no formula errors exist.

Once you create the variable, drag it into the *End of Section* area for the last two sections and for the entire report. The *End of Section on: Function Label* is actually the sum of the *Posting Amount* that we added to the table. Therefore, you do not need to place the *Grand Total* variable in that section. The total for the *Function Label* will be show in the sum in the table.





Applying a grand total for a given section requires knowledge of creating formulas and variables, which is covered in more detail within Chapter 6

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Breaks

A *Break* is a division in a table in which data is grouped into parts according to a selected value. These parts are represented as *smaller tables*. You use breaks to display all the data for each unique value of a *Dimension Object* in separate tables. Using breaks is advantageous because it allows you to display subtotals and is an efficient way to organize how your data is represented. To insert a break, select the cell where you want to apply a break and navigate to the *Insert Break* tool on the *Report* toolbar. Apply the break and edit it using the provided options.

1. Edit your query and drag ***Object Type*** into the *Results Objects Panel*.

   COA-Fund Accounting > Object > Object Hierarchy > ***Object Type***

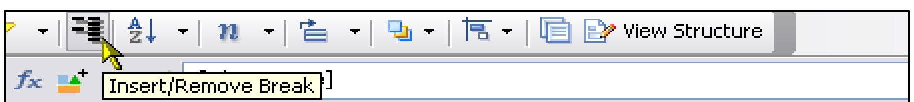
2. ***Run*** the Query using the same parameters as before.
3. Drag ***Object Type*** onto your report in front of *Object Name.*

0100 - General Fund

DFCX - FIN FSS Commissioners Ofc

Object	Object Type	Object Name
E111	1	Regular Salaries And Wages
E121	1	Employers Fica
E122	1	Emp Ret-Inc Paymt F/Sick Leave
E321	3	Office Supplies
E326	3	Household And Kitchen Supplies
E399	3	Other

4. Click on ***Object Type*** and click on the ***Insert/Remove Break*** icon in the *Report* toolbar and add a break.



0100 - General Fund

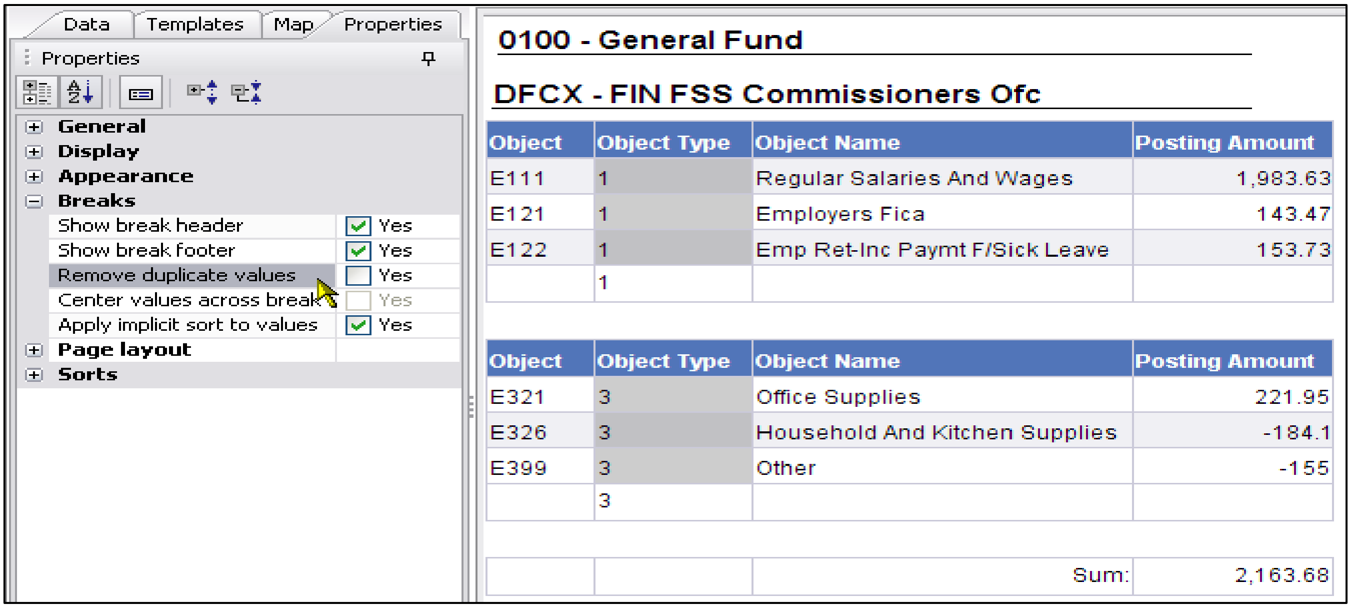
DFCX - FIN FSS Commissioners Ofc

Object	Object Type	Object Name	Posting Amount
E111	1	Regular Salaries And Wages	1,983.63
E121	1	Employers Fica	143.47
E122	1	Emp Ret-Inc Paymt F/Sick Leave	153.73
E321	3	Office Supplies	221.95
E326	3	Household And Kitchen Supplies	-184.1
E399	3	Other	-155
		Sum:	2,163.68

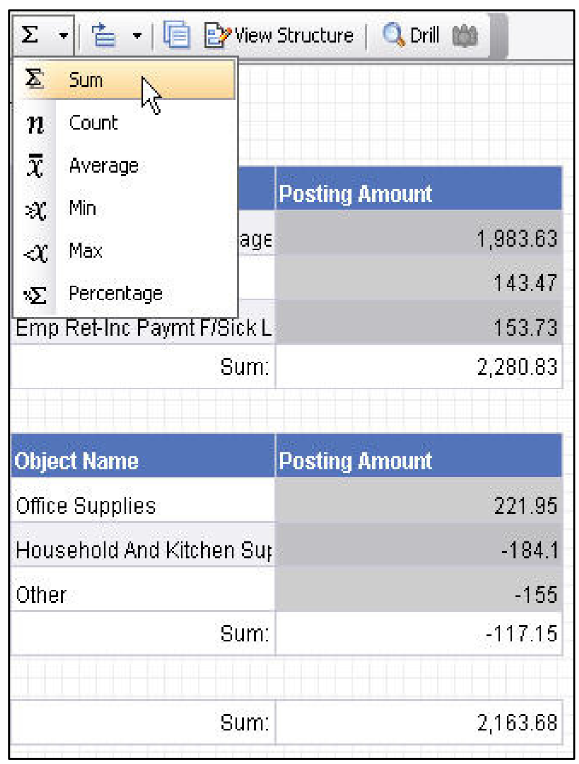
A break is applied to ***Object Type***. In your report, you can see that for each *Fund/Function,* the report is broken down by ***Object Type***.

If you prefer to see the ***Object Type*** repeated on each line of data, click on the ***Object Type*** column and:

5. Uncheck *Remove Duplicate Values* under *Break Properties.*



Since a break puts similar data together in separate tables, it is easy to subtotal these different groups of data. To use the subtotaling capability when you use a break, first you must be sure that in the *Break Properties* tab, the option *Show Break Footer* is checked. This is where the subtotal will appear in each separate table. Select the column of data that you want to subtotal and navigate to the toolbar where you see the *Insert Sum* tool. Click the drop down list and choose the ***Sum*** option to total your data. This will subtotal each separate group of data at the bottom of each table.



6. Click in the ***Posting Amount*** field (in the cell where the numbers are shown, **not** the header field).

7. Select ***Sum*** from the drop down next to the ***Insert Sum*** icon.

You will notice that a sum is created for each break on ***Object Type****.* There is also a ***Grand Total*** created for each ***Function****.*

8. ***Save*** your report as ***"Training-Sections_Breaks-Your Name"***.

Exercise 2: Sections & Breaks

Review

1. Discuss the benefits of using a *Section* in your report.

2. Discuss the benefits of using a *Break* in your report.

Hands-On Instructions

Task Overview

Using the report created in *Exercise 1,* practice creating sections, breaks and totals.

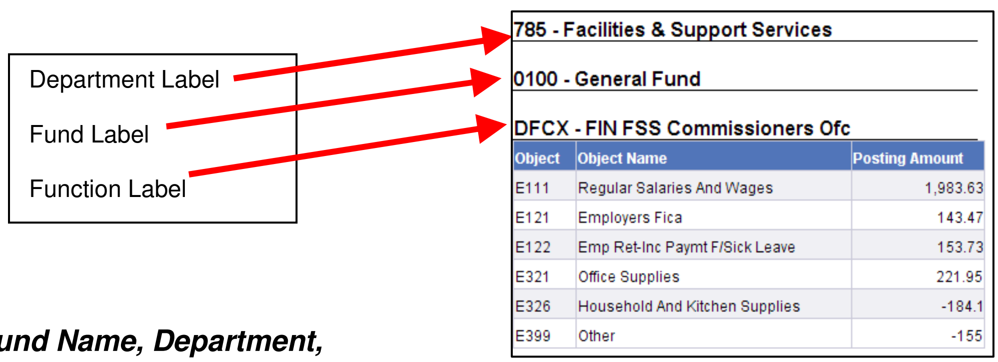
1. Open "***Exercise 1 – Your Name***" in *Edit* mode.

2. Create Labels for ***Department – Department Name***, ***Fund – Fund Name***, *and* ***Function – Function Name***.

3. While viewing the report, select the ***Department Label*** dimension.

4. Drag ***Department Label*** above the table until you create a *Section.*

5. Create a *Section* on ***Fund Label*** and ***Function Label***.

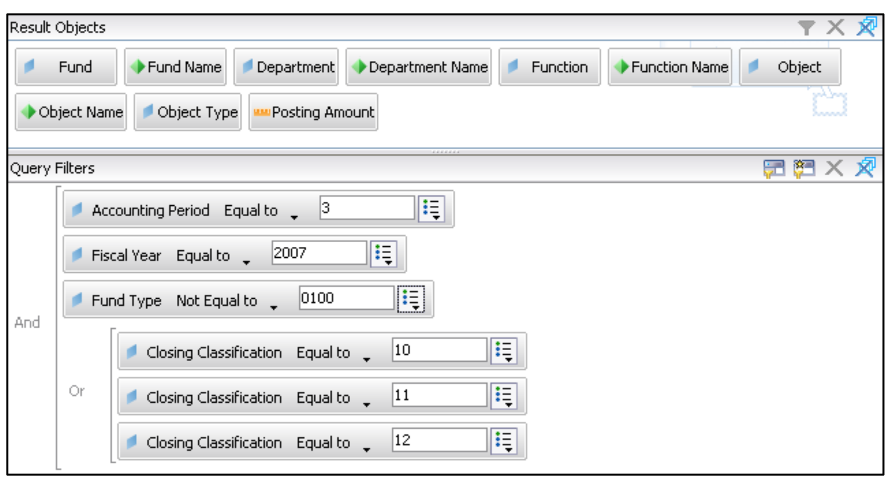


6. Remove the ***Fund, Fund Name, Department, Department Name, Function*** and ***Function Name*** columns from your report.

7. Edit your query and add ***Object Type*** to the *Result Objects Panel.*

8. Add a filter to **exclude** *General Fund* accounts (***Fund Type*** not equal to 0100).

9. ***Run*** your query.



10. Add ***Object Type*** to your report in front of ***Object***.

11. Add a *Break* to the report by ***Object Type.***

    Be sure to show duplicates in the break.

12. Select the ***Posting Amount*** column.

13. Go to the calculation drop down list in the toolbar and click the Insert Sum icon then ***Sum*** the values in the column.

785 - Facilities & Support Services

132H - Finance Facilities Services Fund

DFHX - FIN FSS Historic Properties

Object Type	Object	Object Name	Posting Amount
1	E150	Other Professional Services-	500
1		Sum:	500

Object Type	Object	Object Name	Posting Amount
3	E242	Freight	9.25
3		Sum:	9.25
		Sum:	509.25

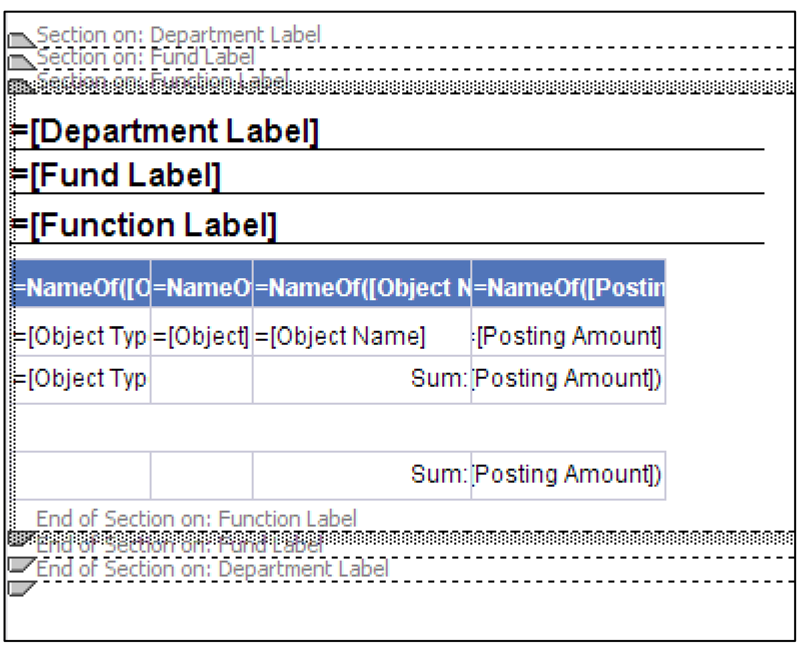
132K - Finance State Surplus Fund

DFFX - FIN FSS Federal Surplus Prop

Object Type	Object	Object Name	Posting Amount
3	E362	Out-Of-State Travel	977.6
3		Sum:	977.6
		Sum:	977.6

14. Go to ***View Structure***

15. Drag each *Section Cell* to the lowest level *Section* to reduce up any unnecessary white space.



16. Use formulas in the Sum: cells of your report to create descriptive labels:

a. ="Total for Object Type "+[Object Type]

b. ="Grand Total for Function "+[Function]

Object Type	Object	Object Name	Posting Amount
3	E224	Copy Machine Rental-1099 Rept	403.02
	E226	Carpool Rental-St Ag	274.63
3		Sum:	677.65
		Sum:	33,437.07

17. When you have finished *Exercise 2*, if the instructor is still assisting other students, take some time and try to do some additional formatting to the report you modified in this exercise.

For example, try to make your report look like the one shown below.

Play around with formatting table, cell, and report properties such as changing borders, background colors, font styles, etc.

785 - Facilities & Support Services

3700 - Property Management Fund

DFCX - FIN FSS Commissioners Ofc

Object Type	Object	Object Name	Posting Amount
1	E111	Regular Salaries And Wages	27,846.91
1	E121	Employers Fica	2,021.02
1	E122	Emp Ret-Inc Paymt F/Sick Leave	2,031.05
1	E123	Employers Health Insurance	853
1	E124	Employers Life Insurance	7.44
1		Total for Object Type 1	32,759.42

Object Type	Object	Object Name	Posting Amount
3	E224	Copy Machine Rental-1099 Rept	403.02
3	E226	Carpool Rental-St Ag	274.63
3		Total for Object Type 3	677.65
		Grand Total for Function DFCX	33,437.07

18. Save your report as "***Exercise 2 – Your Name***".

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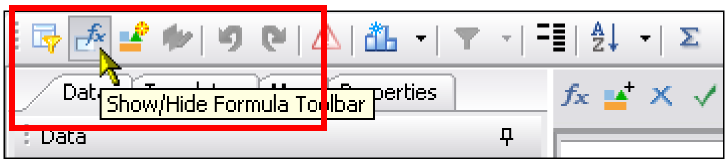
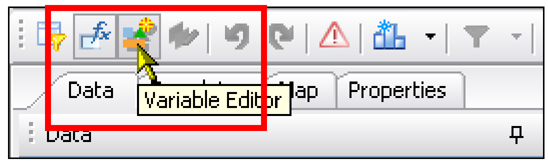
Chapter 6: Formulas & Variables

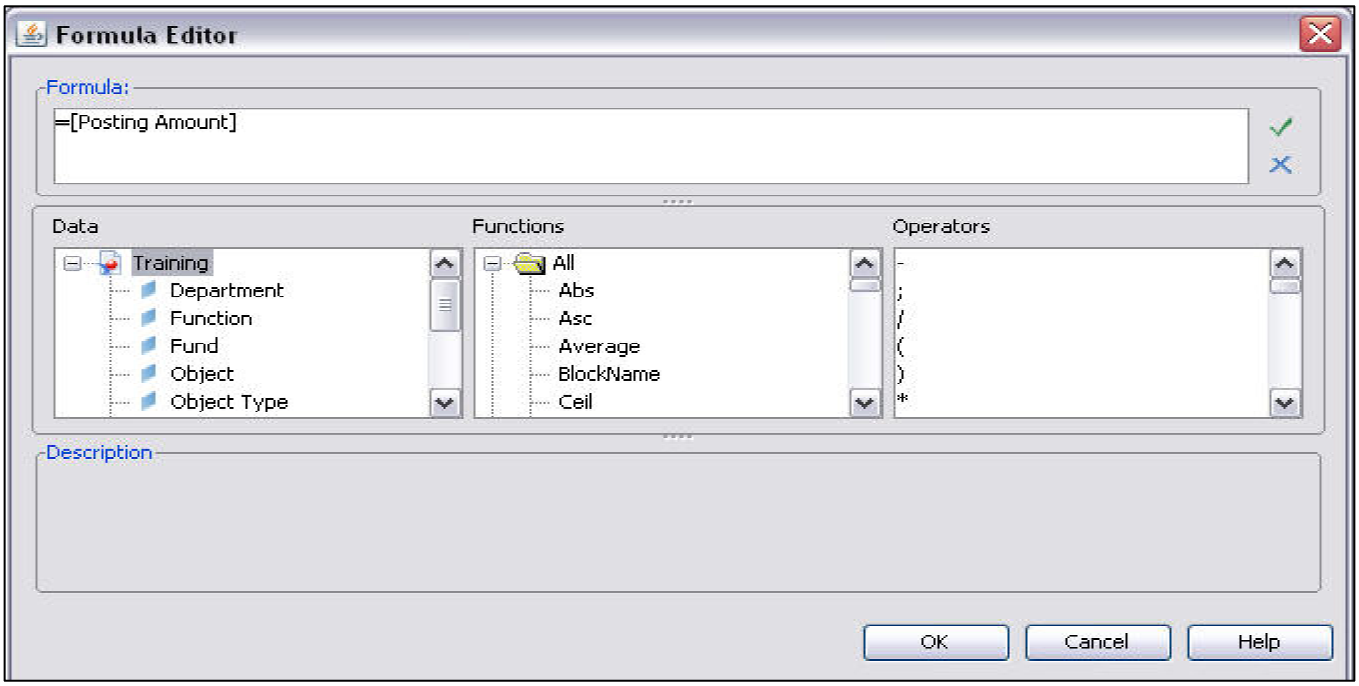
Custom Calculations

Sometimes the simple calculations offered do not meet your analysis needs. In this case, you may create custom calculations using the *Formula Editor.* This is an interface that allows you to select the different components of your formula such as *Available Objects*, *Available Functions*, and *Available Operators*, and add to it to create a custom formula. To access the *Formula Editor*, click the *Show/Hide Formula Toolbar* to show the toolbar and then click the *Formula Editor* icon on the toolbar.

The Formula Editor







A custom calculation may consist of only report objects or include functions and operators as well. Simply double click on the desired Objects, Functions, and Operators to move them to the *Formula* box to create a formula.

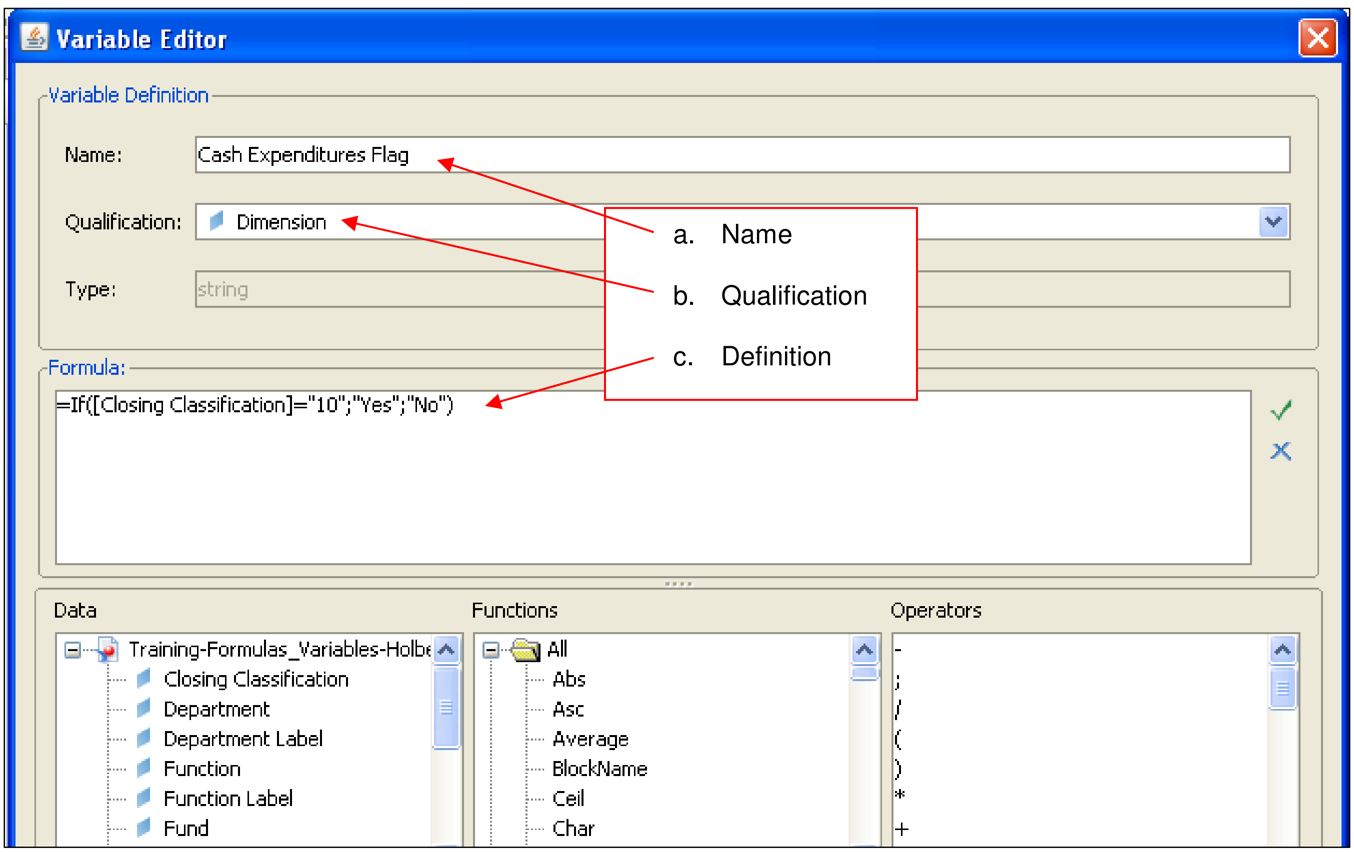
The formulas you create may be saved as variables; *a variable is simply a named formula*. Saving formulas as variables allows you to re-use a formula in a report without having to re-create it each time. It also enables you to simplify complex formulas by breaking them down into variables.

If you know you want to create a formula and save it as a variable, you can create it right away in the *Variable Editor,* instead of going to the *Formula Editor*. Access the *Variable Editor* by clicking the *Variable Editor* button in the toolbar.

Let's begin creating our Expenditure variables. We will be creating variables for Accrued and Cash Expenditures.

To create *Expenditure* variables, we must use *Closing Classification* in our formulas.

1. Open your report titled "***Training-Sections_Breaks-Your Name***"
2. Edit your query and add ***Closing Classification*** to the *Result Objects Panel*.
3. Add a Query Filter condition that says ***"Fund Type Not Equal to 0100"***.
   a. This will exclude *General Fund* accounts.
4. ***Run*** the query using the same values for the prompts as before.
5. Remove ***Posting Amount.***
6. Click on ***Variable Editor***.
7. In the *Variable Editor*, set up a variable for ***"Cash Expenditures Flag".***
   a. Name your ***Variable***
   b. Choose the correct ***Qualification (Dimension, Measure* or *Detail*)**
   c. Create the ***Formula Definition***



To define a variable, you will use *Operators, Functions,* and *Data..*

For the variable we are using in our report we need to use an ***IF…THEN…ELSE*** statement. You must always start a formula with an equal "**=**" sign.

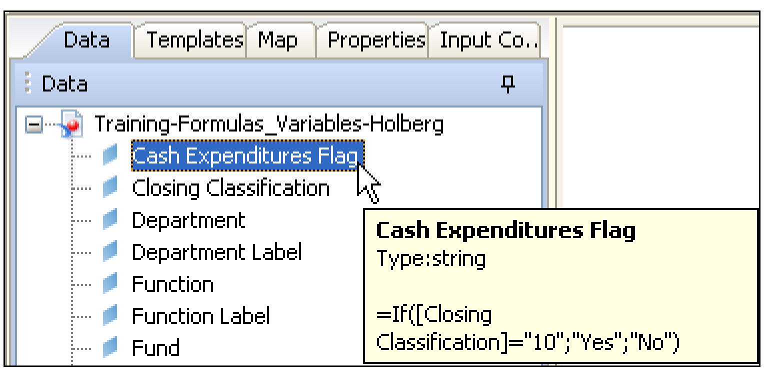
=	Always start a formula with an **equal sign.**
if( )	*Conditions* go inside the **parenthesis.**
[Closing Classification] = "10"	If **closing classification equals 10** then we want to show the *Posting Amount*.
;	The semi-colon signifies **THEN.**
"Yes"	If the first condition is met, then we want to see *Posting Amount*
;	The semi-colon signifies **ELSE.**
"No"	If *Closing Classification* does not equal 10 then we do not want to see *Posting Amount.*

Therefore, our formula will be defined as ***=If([Closing Classification]="10";"Yes";"No")***

8. Click on ***OK*** to *Validate* the formula and make sure it is correct.

   If the formula cannot be validated, infoAdvantage will point out where your error is with an error message and by placing your cursor on the error. Errors must be corrected before you will be allowed to *Save/Validate* the variable.

After you close the *Variable Editor*, you will notice that your variable now shows up in the *Report Manager*.



The "Flag" Rule

There may be times when you need to use a data object in a variable but do not need to include it in your table. For example, *Closing Classification* is frequently used to narrow down amounts included in a total, but it is not desirable to include *Closing Classification* in the report table. It use to be possible to include *Closing Classification* as a hidden object in the table.

However, in BO XI, hidden objects are no longer permitted. Instead, flag variables are used to replace *If…Then…Else* statements with a *Where* clause when defining a measure. This makes it possible to narrow down amounts included in totals without including the unwanted field in the report table.

In creating our variables, we will follow what is referred to as the "flag" rule: *Create a flag for any conditions (as a Dimension), then use the Where clause in the definition of your Measure*. **This approach is recommended because it simplifies reports.**

These Flag Variables are created to assign a "Yes" or "No" value to the selected dimension. So in the case of *Cash Expenditure Flag* if *Closing Classification* = 10 then assign the text "Yes" and then every other value will be assigned "No". We will use the "Yes" and "No" values when we create our measures. Following this "flag" rule, the variables in our report should contain the following formulas:

- **Cash Expenditures Flag =If([Closing Classification]="10";"Yes";"No")**
- **Cash Expenditures =[Posting Amount]Where([Cash Expenditures Flag]="Yes")**
- **Accrued Expenditures Flag =If([Closing Classification]="11";"Yes";"No")**
- **Accrued Expenditures =[Posting Amount]Where([Accrued Expenditures Flag]="Yes")**

Setting Up a Flag Variable

It is recommended that a naming convention be adopted for flag variables. That is, a flag variable should be named using the same variable name as the measure, but with "Flag" appended to the variable name. For example, if the measure being defined is called **[Cash Expenditures]**, then the flag variable associated with it would be called **[Cash Expenditures Flag]**.

9. Click on ***Variable Editor***.

We have already created the ***Cash Expenditures Flag***. Create **another Flag variable:**

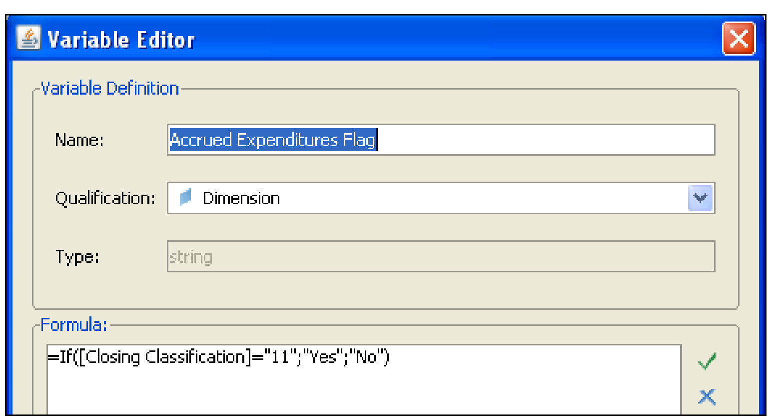
10. In the *Variable Editor*, set up a variable for ***"Accrued Expenditures Flag".***

d. Name your ***Variable***

e. Choose the correct ***Qualification (Dimension)***

f. Create the ***Formula Definition -*** **=If([Closing Classification]="11";"Yes";"No")**

a. Accrued Expenditure Flag:

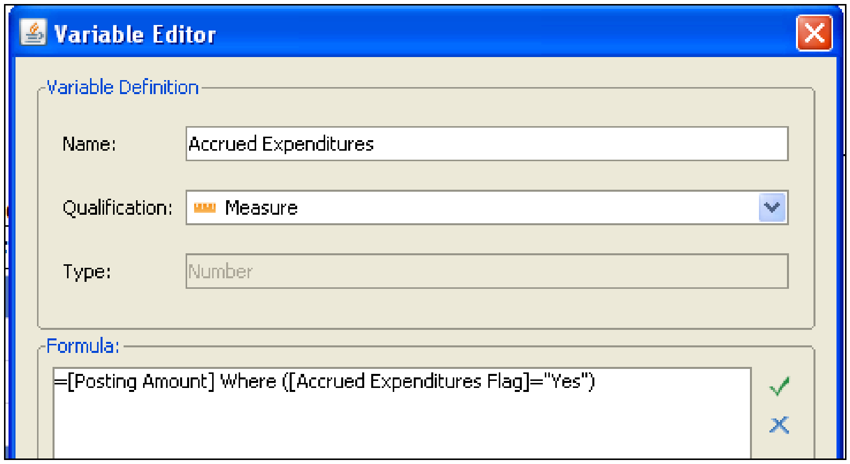


Setting Up Measure Variables

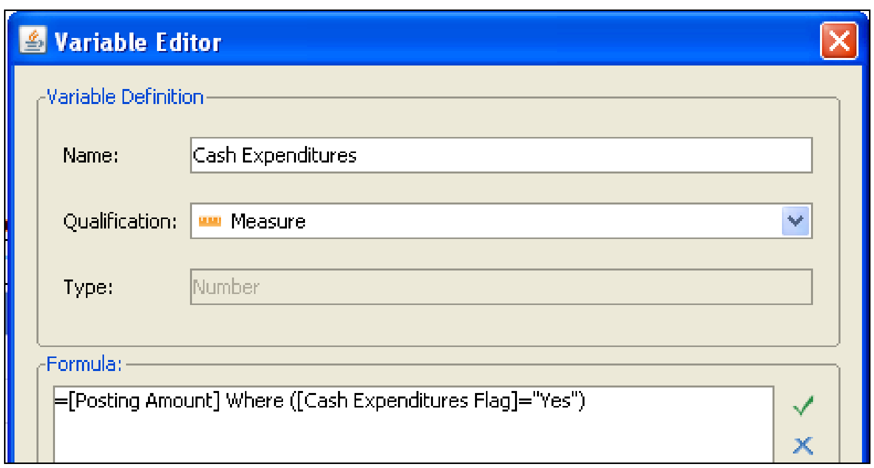
Now we need to create Measure Variables to display *Posting* Amount only when our flag variables are "Yes". This will essentially evaluate *Closing Classification* outside of the table so that *Closing Classification* does not need to be included in the table.

Create **Two Measure variables:**

b. *Accrued Expenditures:*



c. *Cash Expenditures:*



11. Add these two measure variables to your report table to the right of ***Object Name***.

The below screenshot shows the report with the two measure variables included in the report table.

132J - Finance Federal Surplus Fund

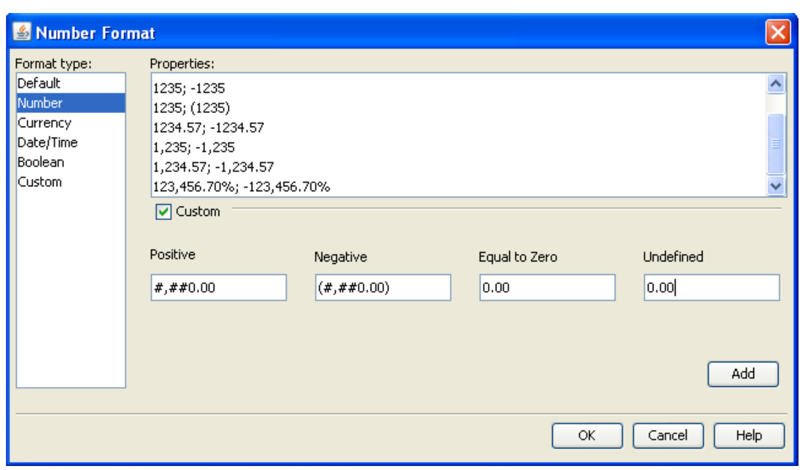
DFFX - FIN FSS Federal Surplus Prop

Object	Object Type	Object Name	Cash Expenditures	Accrued Expenditures
E111	1	Regular Salaries And Wages	10,881.01	
E121	1	Employers Fica	784.58	
E122	1	Emp Ret-Inc Paymt F/Sick Leave	843.28	
E123	1	Employers Health Insurance	1,854.77	
E124	1	Employers Life Insurance	7.44	
E162	1	Security Guard Serv-1099 Rept	443.25	
	1			

Object	Object Type	Object Name	Cash Expenditures	Accrued Expenditures
E224	3	Copy Machine Rental-1099 Rept		216.97
E226	3	Carpool Rental-St Ag	502.75	
E235	3	Maint Of Vehicles-1099 Rept		861.64
E241	3	Postage And Postage Meters	520	24.25
E256	3	Garbage Collection-1099 Rept	819.88	0
E318	3	Commercial Supplies	273	564.3
E321	3	Office Supplies	28.59	423.34
E323	3	Janitorial & Mainten Supplies	532.34	0
E333	3	Motor Vehicle Supplies & Parts		88.82
E336	3	Small Tools	99	659.88
E337	3	Mech Maint Materials & Suppls		326.94

Note: Where there are no records meeting the flag conditions, an empty cell is displayed. This can be corrected to display these NULL values as zero values by applying a custom format to the number in the cell. Formatting cells and numbers was described in the ***1102 eMARS Standard Reporting Introduction to InfoAdvantage*** *class*.

12. Save your report as **"Training – Formulas_Variables – Your Name"**



Exercise 3: Adding Formulas & Variables

Review

1. ***True*** or ***False*** When creating a variable, if you need to use an object in the formula, you do not have to include that object in the *Results Objects Panel* or in your table.

2. When would you use a Flag Variable?

3. You must always start a formula with
   a. an ***Equal Sign* (=)**
   b. an ***if()***
   c. a ***Variable***

4. ***True*** or ***False*** *Variables* will not show up in the *Report Manager.*

5. In the *Variable Editor*, what are the three sections that must be completed prior to saving or validating the variable?
   1.
   2.
   3.

Hands-On Instructions

Task Overview

Using your *Exercise 2* report, create variables for *Expenditures* and *Encumbrances* in a report.

1. Open "***Exercise 2 – Your Name***" in *Edit* mode.
2. Click ***Edit Query*** to go to the *Query Panel.*
3. Add ***Closing Classification*** to the *Result Objects Panel.*
4. ***Run*** your *Query*.
5. Add *Closing Classification* to your report in front of *Posting Amount.*

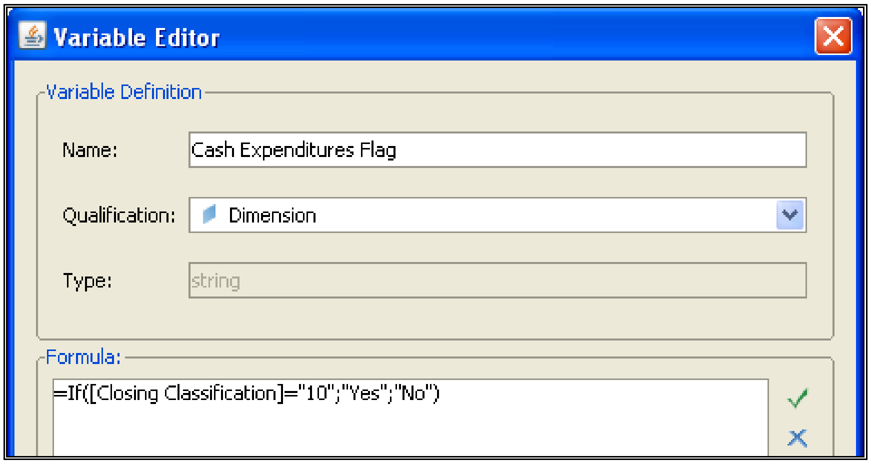
785 - Facilities & Support Services

132K - Finance State Surplus Fund

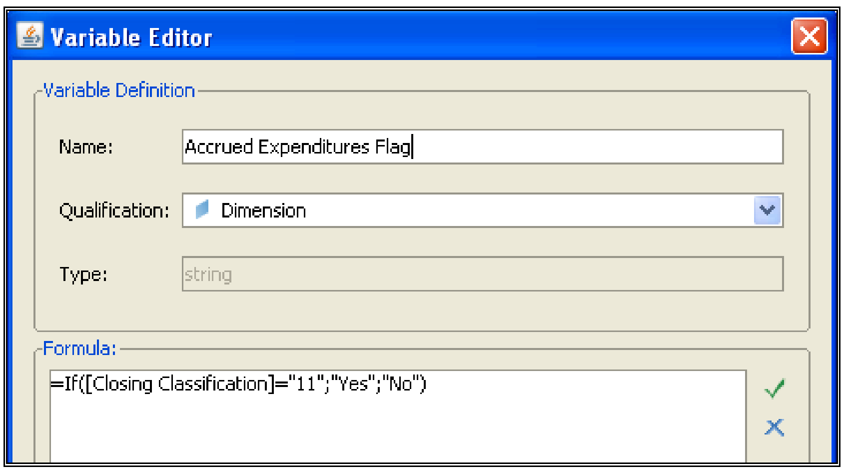
DFFX - FIN FSS Federal Surplus Prop

Object Type	Object	Object Name	Closing Classificat	Posting Amount
3	E362	Out-Of-State Travel	10	977.6
3	E362	Out-Of-State Travel	11	0
3		Total for Object Type 3		977.6
		Grand Total for Function DFFX		977.6

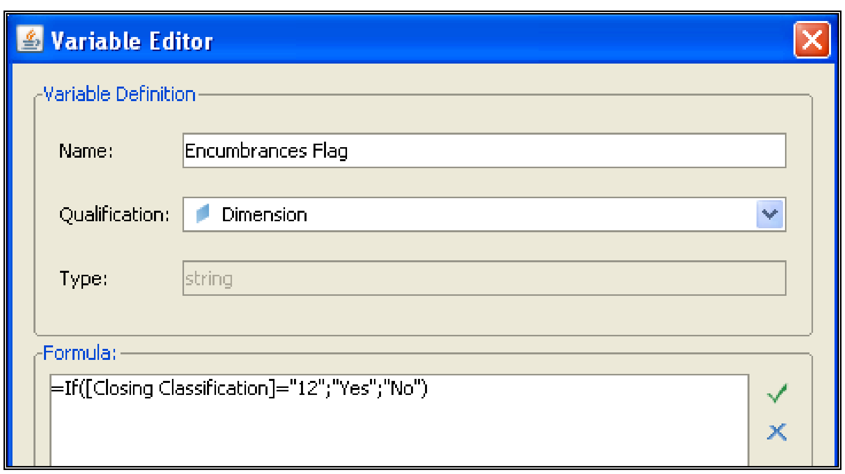
6. Create three **Flag** variables: ***Cash Expenditures Flag, Accrued Expenditures Flag*** and ***Encumbrances Flag***.
   a. *Cash Expenditures* have a *Closing Classification of 10*



   b. *Accrued Expenditures* have a *Closing Classification of 11*

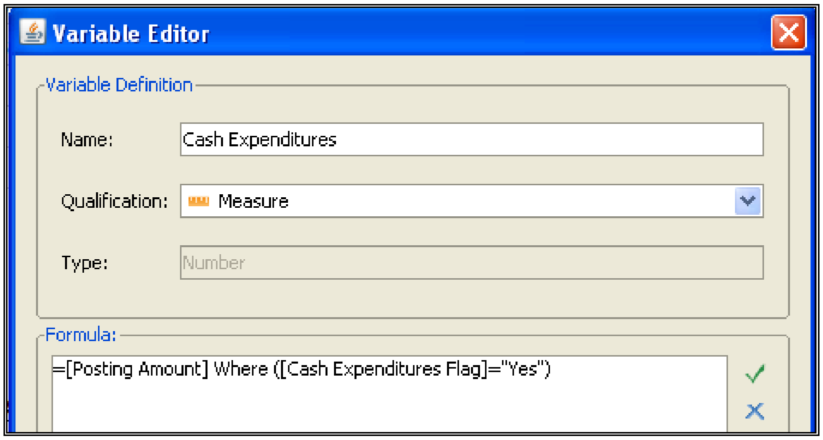


   c. *Encumbrances* have a *Closing Classification of 12*

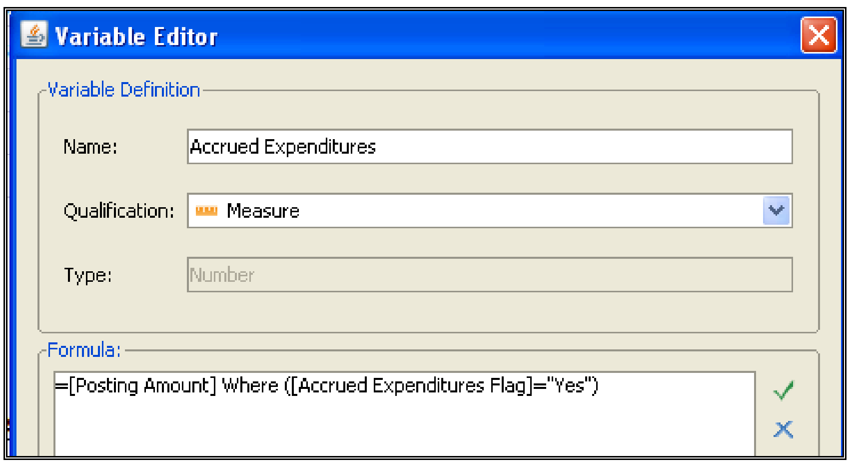


7. Create three **Measure** variables using the Flag variables you just created in Step 6: ***Cash Expenditures, Accrued Expenditures*** and ***Encumbrances***.

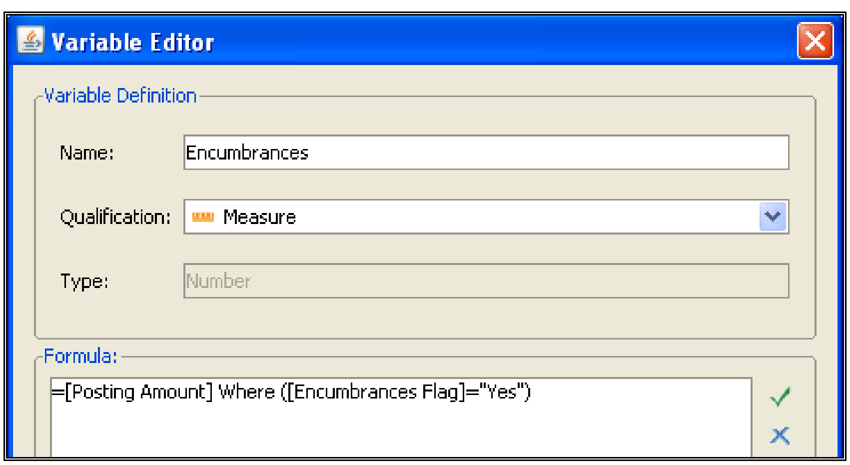
   a. *Cash Expenditures*



   b. *Accrued Expenditures*



   c. *Encumbrances*



8. Add the measure variables you created to your report and remove *Closing Classification* and *Posting Amount.* You may have to format the numbers in the cells to display 0.00 for NULL values.

9. Add subtotals for each variable you added to the report.

Use the example show below as a guide for making the changes to your report.

785 - Facilities & Support Services

132H - Finance Facilities Services Fund

DFHX - FIN FSS Historic Properties

Object Type	Object	Object Name	Cash Expenditures	Accrued Expenditu	Encumbrances
1	E150	Other Professional Services-1099 R	500.00	0.00	0.00
1		Total for Object Type 1	500.00	0.00	0.00

Object Type	Object	Object Name	Cash Expenditures	Accrued Expenditu	Encumbrances
3	E242	Freight	9.25	0.00	0.00
3		Total for Object Type 3	9.25	0.00	0.00

		Grand Total for Function DFHX	509.25	0.00	0.00

10. While waiting for the instructor to continue, experiment with additional formatting changes to your report.

11. Save your report as "***Exercise 3 – Your Name***".

Chapter 7: Merging Multiple Data Providers

Merging Data Providers

Merging data providers enables data from different *Data Providers (Universes)* to be computed in the same table. To demonstrate merging universes, we will build a *Daily Allotment Report*. This report will use the *General Accounting Universe* to bring in *Expenditures* and *Encumbrances* and the *Budget Execution – KY Universe* to bring in *Allotments*.

1. Click on ***My Favorites***
2. Click on ***New > Web Intelligence Document*** on the Home Panel Toolbar to create a new report.
3. Select ***General Accounting Universe***.

To merge *Dimension Objects* from different *Data Providers* you must create two separate queries. Once you have created your queries then you will manually merge *Dimension Objects* using the Merge Icon on the Reporting Toolbar.

> ***Note:*** Only *Dimension Objects* may be joined from multiple *Data Providers*. *Detail* or *Measure Objects* **cannot** be joined.

General Accounting Query:

4. Drag the following ***Objects*** into the ***Result Objects Panel*** for Query 1:

   a. Budget Fiscal Year > ***BFY***

   b. Accounting Period > ***Fiscal Quarter***

   c. COA-Organization > Organization – Centralized view > ***Cabinet***

   d. COA-Fund Accounting > Fund > Fund hierarchy > ***Fund Type***

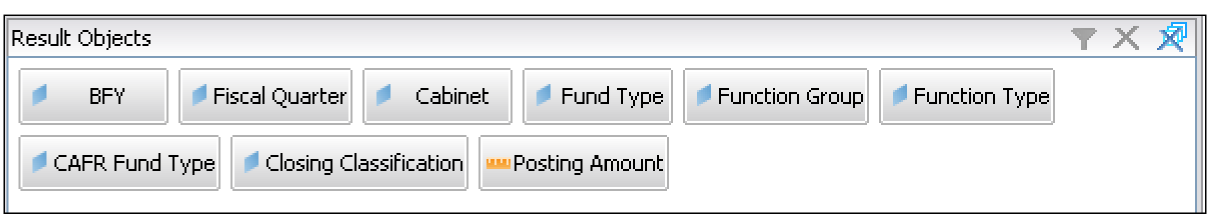
   e. COA-Detailed Accounting > Function > Function hierarchy > ***Function Group***

   f. COA-Detailed Accounting > Function > Function hierarchy > ***Function Type***

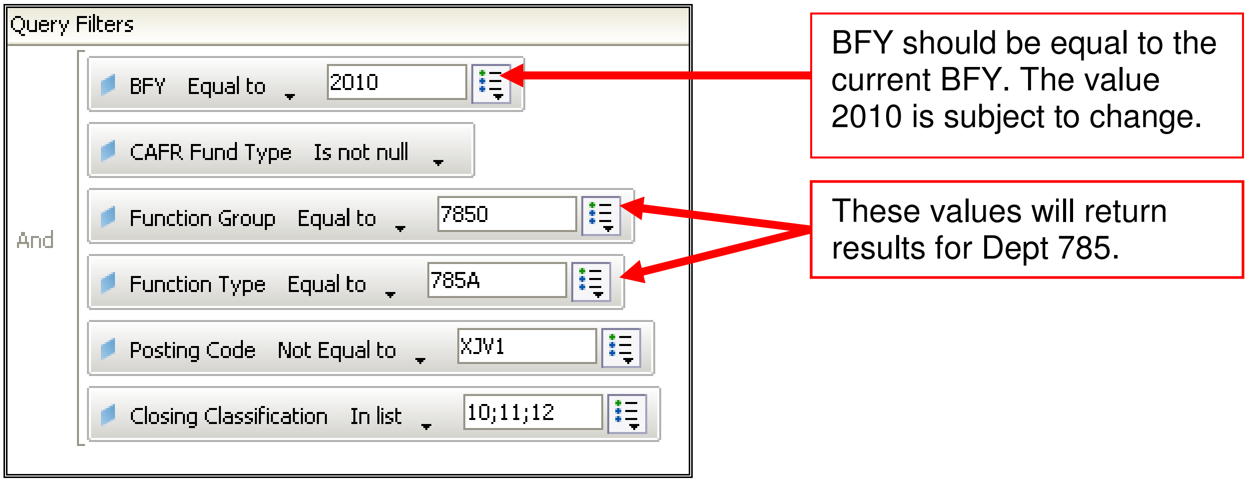
   g. COA-Fund Accounting > Fund > CAFR Fund > ***CAFR Fund Type***

   h. Posting Code > ***Closing Classification***

   i. Detailed Accounting Ledger > ***Posting Amount***

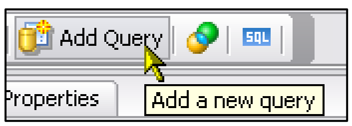


5. Add the following Filters to the **Query Filters Panel** for Query 1:

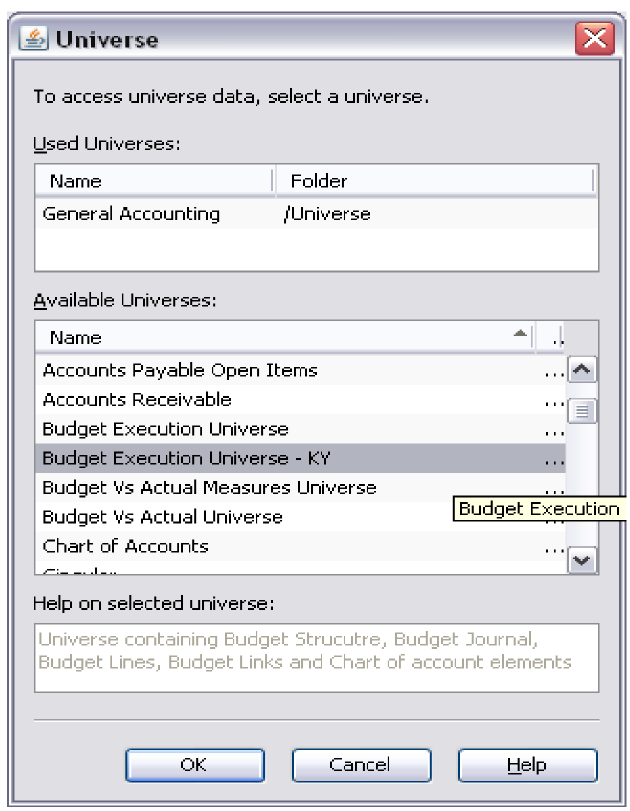


Next you will need to create a query from the Budget Execution Universe - KY. You can create a new query by Clicking on the *Add Query* Icon on the Query Toolbar.

6. Click on ***Add Query***.



Once you click on the *Add Query* Icon you will receive a box that provides a list of Universes to select the Universe needed for your second query.



7. Select the ***Budget Execution Universe – KY***.

8. Click ***OK.***

Now that you have selected the *Budget Execution Universe – KY*, you will need to build your second query.

Budget Execution Universe – KY Query:

9. Drag the following ***Objects*** into the ***Result Objects Panel*** for Query 2:

a. Budget Fiscal Year > ***BFY***

b. Budget Structure > Allotment Option > ***Allotment Period Name***

c. COA-Organization > Organization – Centralized view > ***Cabinet***

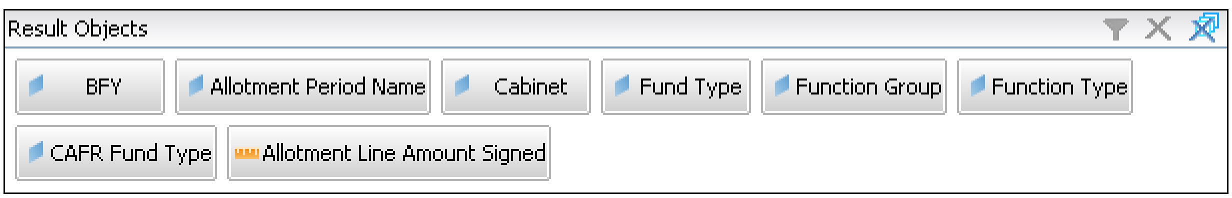
d. COA-Fund Accounting > Fund > Fund hierarchy > ***Fund Type***

e. COA-Detailed Accounting > Function > Function hierarchy > ***Function Group***

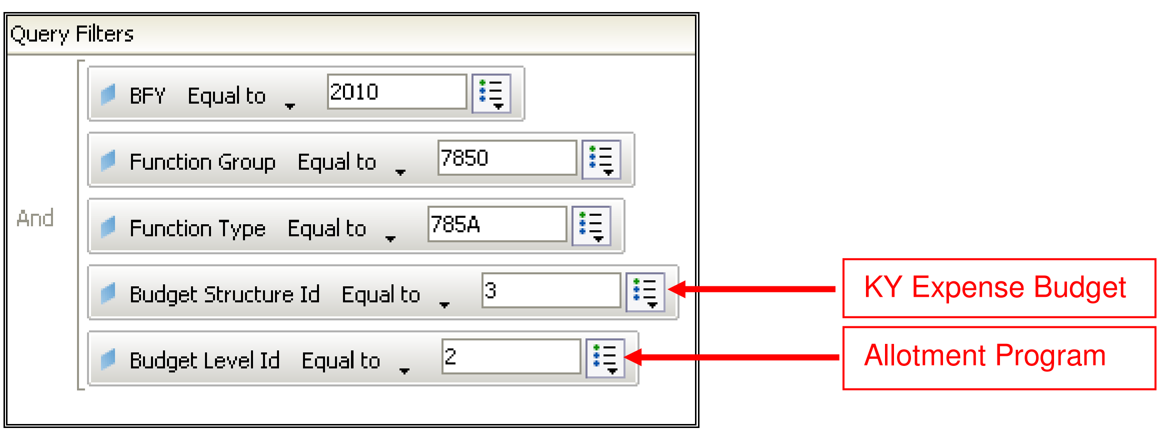
f. COA-Detailed Accounting > Function > Function hierarchy > ***Function Type***

g. COA-Fund Accounting > Fund > CAFR Fund > ***CAFR Fund Type***

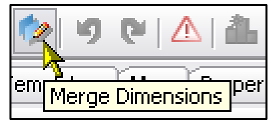
h. Budgeting Journal > Allotment Information > ***Allotment Line Amount Signed***



10. Add the following Filters to the **Query Filters Panel** for Query 2:

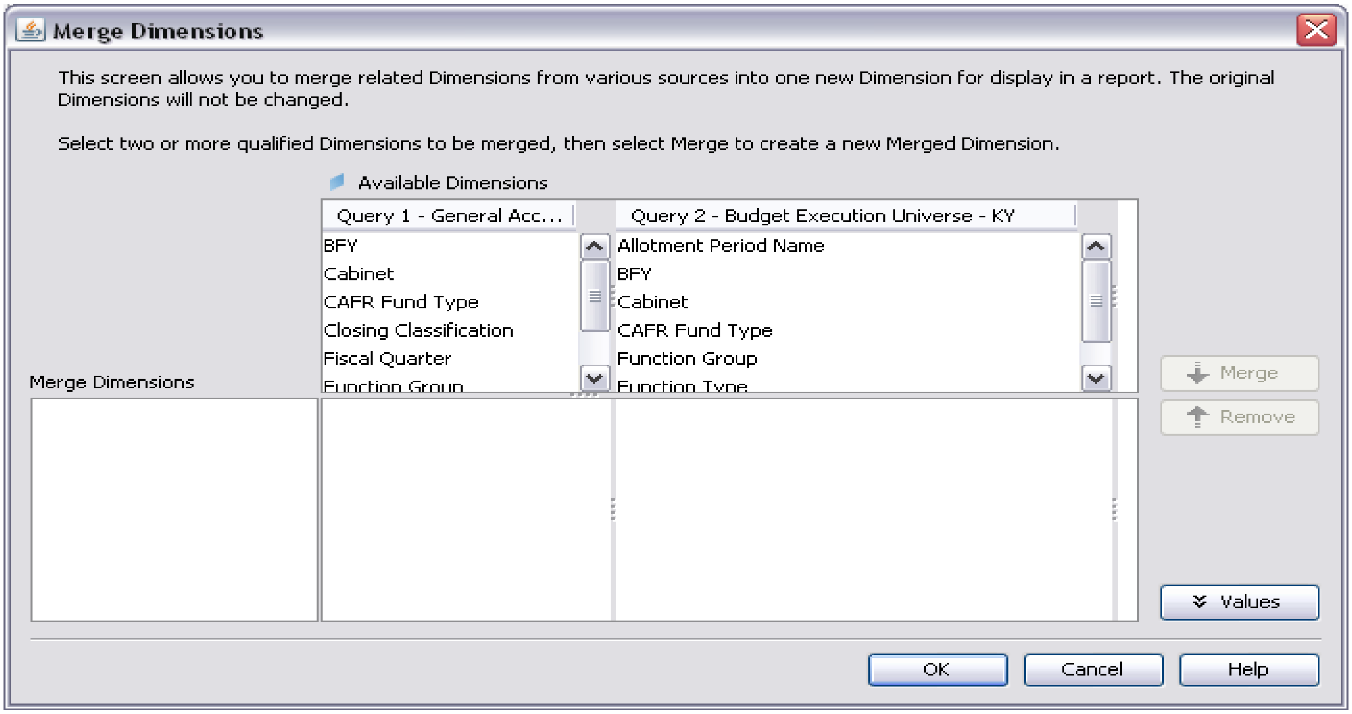


11. Click **Edit Report** – this will save the two queries without retrieving data so that the dimension objects can be merged before the report is refreshed.



Now that you have the two queries built you will need to merge the like objects. You will use the Merge Dimensions dialog box to synchronize data providers through common dimension objects. When you merge dimensions, Web Intelligence creates a new merged dimension that you can use in your report.

12. Click the **Merge Dimensions** icon.

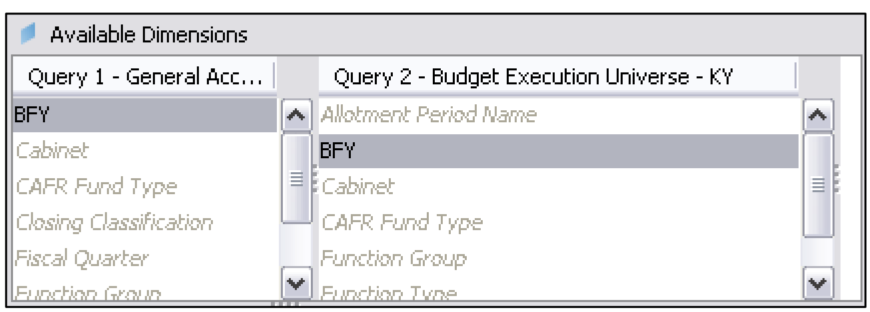


Notice that the *Available Objects* are populated with dimensions from both queries.

To merge the Available Dimensions you will need to click on the dimension from Query 1 and the associated dimension from Query 2. Once you have the two dimensions selected that you want to merge you will then click *Merge*.

13. Click ***BFY*** in both *Query 1* and *Query 2*.

14. Click ***Merge***.

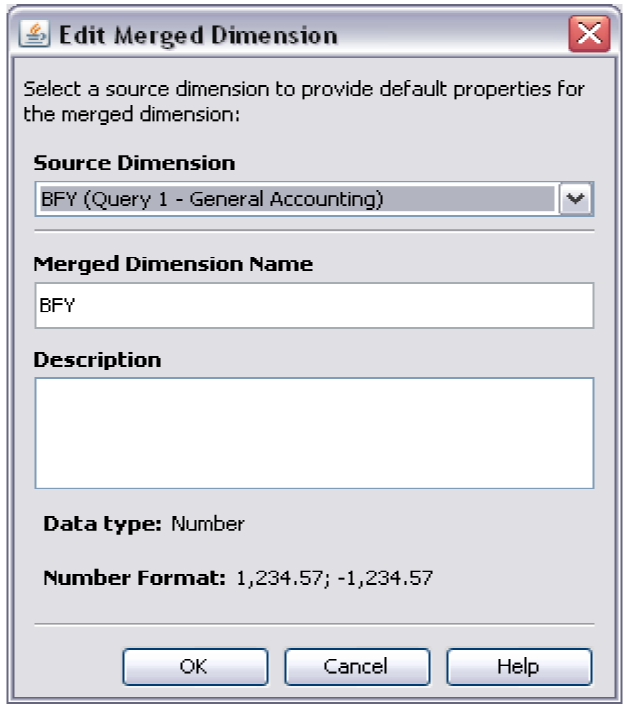


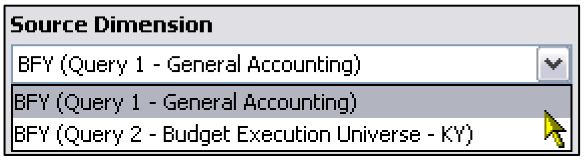
Note: When you select a dimension, all of the dimensions with different data types become unavailable because you can only merge those dimensions with the same data type.

Once you click *Merge* the *Edit Merged Dimension* dialogue box appears.

The *Edit Merged Dimensions* box allows you to: select the **Source Dimension**, name the **Merged Dimension** and give it a **Description**.

The **Source Dimension** allows us to select whether we want the Source of this merged dimension to be from Query 1 or Query 2.

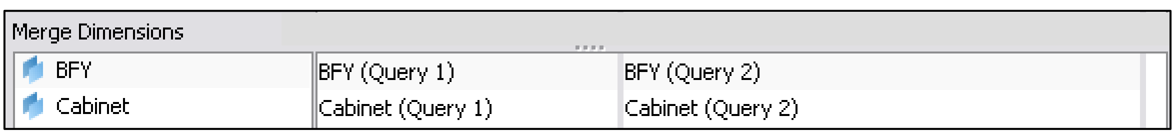




15. Select **BFY (Query 1 – General Accounting)** as the *Source Dimension*.

16. Click **OK.**

Once you click OK infoAdvantage adds the merged dimension to the *Merged Dimensions* list in the *Merge Dimensions* dialog box.



17. **Merge** the following dimensions:
    - **a.** Cabinet – Cabinet
    - **b.** CAFR Fund Type – CAFR Fund Type
    - **c.** Function Group – Function Group
    - **d.** Function Type – Function Type
    - **e.** Fund Type – Fund Type
    - **f.** Fiscal Quarter – Allotment Period Name

Note: Because allotments are set up based on *Allotment Periods* we have to use ***Fiscal Quarter*** in order to have a meaningful merge.

You will only have one unmerged dimension: **Closing Classification.**

18. ***Refresh*** the queries by clicking  .

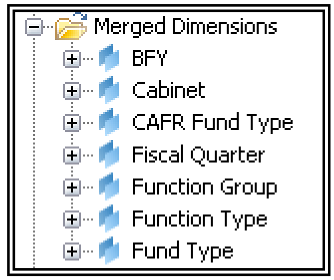
Your report should look similar to the report below once you have added the merged objects:

BFY	Fiscal Quarter	Cabinet	Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Posting Amount
2010	First	39	0100	7850	785A	GNRL	10	1,655,100.00	1,594,004.52
2010	First	39	0100	7850	785A	GNRL	11	1,655,100.00	0.00
2010	First	39	0100	7850	785A	GNRL	12	1,655,100.00	24,255.03
2010	First	39	1300	7850	785A	RSTD	10	260,900.00	201,702.20
2010	First	39	1300	7850	785A	RSTD	11	260,900.00	0.00
2010	First	39	1300	7850	785A	RSTD	12	260,900.00	0.00
2010	First	39	3700	7850	785A	RSTD	10	8,435,500.00	7,344,446.54
2010	First	39	3700	7850	785A	RSTD	11	8,435,500.00	0.00
2010	First	39	3700	7850	785A	RSTD	12	8,435,500.00	227,374.14
2010	Second	39	0100	7850	785A	GNRL	10	1,703,100.00	1,565,838.02
2010	Second	39	0100	7850	785A	GNRL	11	1,703,100.00	1,267.18
2010	Second	39	0100	7850	785A	GNRL	12	1,703,100.00	0.00
2010	Second	39	1200	7850	785A	FDRL	10	262,500.00	6,327.70

Incompatible Objects

Unlinked *Dimension Objects* from different *Data Providers (Queries)* are called *Incompatible Objects*, meaning they cannot appear in the table at the same time. You may include unmerged *Dimension Objects* from only one *Data Provider* in the table. Notice that in your query from the *General Accounting Universe*, *Closing Classification* is left unmerged to any other *Dimension Object*.

> ***Note:*** InfoAdvantage will only allow you to have ONE *Dimension Object* in your report (table) that is not merged. If there was another *Dimension Object* besides *Closing Classification* that would not be merged to the *BE-KY* universe, you would not be allowed to use both objects in your report.



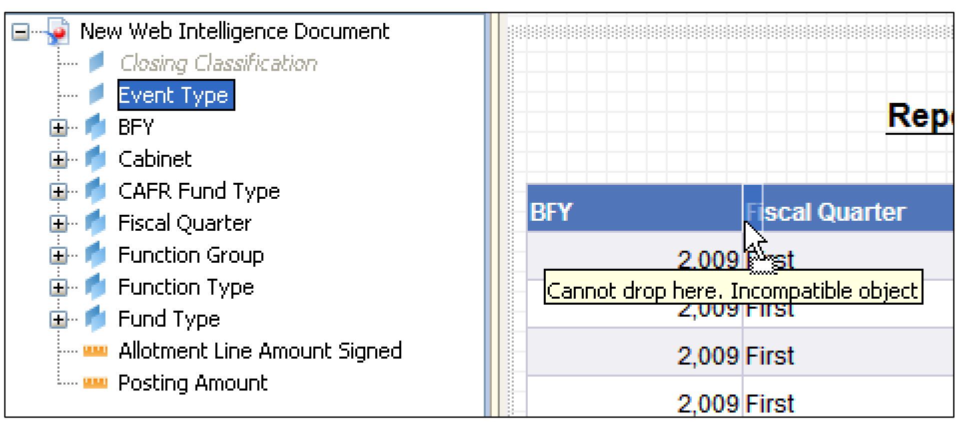
In a table, you are allowed to have:

- Merged *Dimension Objects* from one or both *Data Providers*
- Unmerged *Dimension Objects* from one *Data Provider*
- *Detail Objects* from one or both *Data Providers* if the *Detail Object* is associated with a linked *Dimension Object*
- *Measure Objects* from one or both *Data Providers*.

In the rules above, it states that you may only have "one *Dimension Object from* one *Data Provider". * If you have multiple *Dimension Objects* from *Data Providers* that are not available in each *Data Provider(s)* in your report, then you will receive an *Incompatible Objects* message as show below.

If you added *Event Type* to the *Budget Execution - KY* query and then added that dimension object to the table, *Closing Classification* could not be added to the table.

19. Click **Edit Query** and add ***Event Type*** to the ***Result Objects Panel*** *for* ***Query 2 - Budget Execution Universe - KY.***
20. ***Run*** the queries.
21. Add ***Closing Classification*** to the table if it's not already there.
22. Attempt to drag ***Event Type*** onto the table. Notice that infoAdvantage will not allow you to add it to the table.



> **Note:** You can only have Unmerged *Dimension Objects* from one *Data Provider* in your table

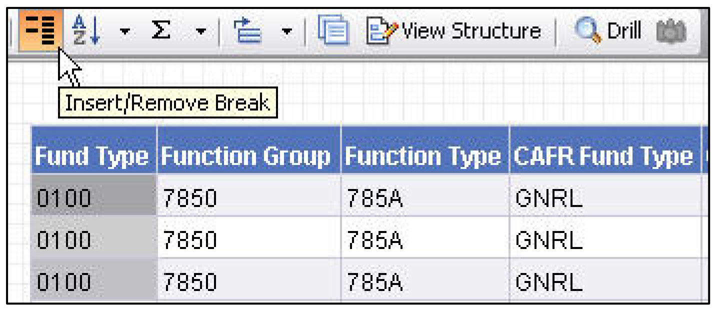
23. Remove ***BFY***, ***Cabinet***, and ***Fiscal Quarter*** from the report.

24. Add ***Allotment Line Amount Signed*** in front of ***Posting Amount*** if it's not already there.

25. Create **two Flag and Measure variables**:

- **Expenditures Flag** **=If([Closing Classification]="10" or [Closing Classification] = "11";"Yes";"No")**
- **Expenditures** **=[Posting Amount]Where([Expenditures Flag]="Yes")**
- **Encumbrances Flag** **=If([Closing Classification]="12";"Yes";"No")**
- **Encumbrances** **=[Posting Amount]Where([Encumbrances Flag]="Yes")**

26. Delete ***Posting Amount*** from the report and add the new measures after ***Allotment Line Amount Signed***.



27. Create a **break** on ***Fund Type.***

28. Uncheck ***Remove Duplicates***.

29. Insert **totals** for each *Measure* or *Variable*

Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures
0100	7850	785A	GNRL	10	5,554,800.00	0.00	3,702,406.20
0100	7850	785A	GNRL	11	5,554,800.00	0.00	1,533.15
0100	7850	785A	GNRL	12	5,554,800.00	24,255.03	0.00
0100				Sum:	5,554,800.00	24,255.03	3,703,939.35
Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures
1200	7850	785A	FDRL	10	262,500.00	0.00	22,111.99
1200				Sum:	262,500.00	0.00	22,111.99
Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures
1300	7850	785A	RSTD	10	1,043,400.00	0.00	482,794.79
1300	7850	785A	RSTD	11	1,043,400.00	0.00	306.30
1300	7850	785A	RSTD	12	1,043,400.00	0.00	0.00
1300				Sum:	1,043,400.00	0.00	483,101.09
Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures
3700	7850	785A	RSTD	10	33,969,100.00	0.00	17,176,528.56
3700	7850	785A	RSTD	11	33,969,100.00	0.00	1,022.39
3700	7850	785A	RSTD	12	33,969,100.00	476,492.98	0.00
3700				Sum:	33,969,100.00	476,492.98	17,177,550.95
				Sum:	40,829,800.00	500,748.01	21,386,703.38

30. Create Variables for ***Unexpended*** and ***Unobligated*** amounts as *Measures* and add them to your report*:*

Unexpended **=[Allotment Line Amount Signed]-[Expenditures]**

Unobligated **=[Allotment Line Amount Signed]-[Encumbrances]-[Expenditures]**

31. In ***View Structure***, add formulas to subtotal ***Unexpended*** and ***Unobligated*** in both the ***Break Footer*** and the ***Grand Total*** line:

Unexpended **=[Allotment Line Amount Signed]-Sum([Expenditures])**

Unobligated **=[Allotment Line Amount Signed]-Sum([Encumbrances])-Sum([Expenditures])**

Your report should now look similar to the report below:

Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures	Unexpended	Unobligated
0100	7850	785A	GNRL	10	5,554,800.00	0.00	3,702,406.20	1,852,393.80	1,852,393.80
0100	7850	785A	GNRL	11	5,554,800.00	0.00	1,533.15	5,553,266.85	5,553,266.85
0100	7850	785A	GNRL	12	5,554,800.00	24,255.03	0.00	5,554,800.00	5,530,544.97
0100				Sum:	5,554,800.00	24,255.03	3,703,939.35	1,850,860.65	1,826,605.62

Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures	Unexpended	Unobligated
1200	7850	785A	FDRL	10	262,500.00	0.00	22,111.99	240,388.01	240,388.01
1200				Sum:	262,500.00	0.00	22,111.99	240,388.01	240,388.01

Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures	Unexpended	Unobligated
1300	7850	785A	RSTD	10	1,043,400.00	0.00	482,794.79	560,605.21	560,605.21
1300	7850	785A	RSTD	11	1,043,400.00	0.00	306.30	1,043,093.70	1,043,093.70
1300	7850	785A	RSTD	12	1,043,400.00	0.00	0.00	1,043,400.00	1,043,400.00
1300				Sum:	1,043,400.00	0.00	483,101.09	560,298.91	560,298.91

Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures	Unexpended	Unobligated
3700	7850	785A	RSTD	10	33,969,100.00	0.00	17,176,528.56	16,792,571.44	16,792,571.44
3700	7850	785A	RSTD	11	33,969,100.00	0.00	1,022.39	33,968,077.61	33,968,077.61
3700	7850	785A	RSTD	12	33,969,100.00	476,492.98	0.00	33,969,100.00	33,492,607.02
3700				Sum:	33,969,100.00	476,492.98	17,177,550.95	16,791,549.05	16,315,056.07
				Sum:	40,829,800.00	500,748.01	21,386,703.38	19,443,096.62	18,942,348.61

32. Save your report as ***Training - Merging Data Providers - Your Name***.

33. Close the *Report Panel* but **do not close or log out of infoAdvantage.**

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Exercise 4: Joining Multiple Data Providers

Review

2) Merging *Data Providers* enables____.

3) What is a way to tell if an object is linked to another object(s)?

a)

4) In a table you may have the following:

a)

b)

c)

d)

5) **True** or **False** Detail Objects must be joined.

6) InfoAdvantage will only allow you to have _____ *Dimension Object(s)* in your report (table) that are not merged.

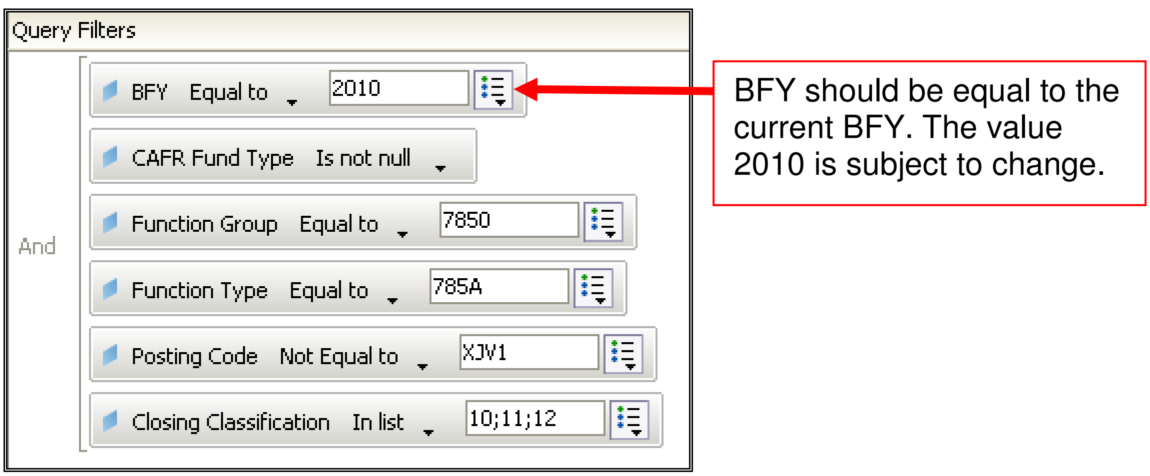
Continue Exercise 4 on the next page.

Hands on Instructions

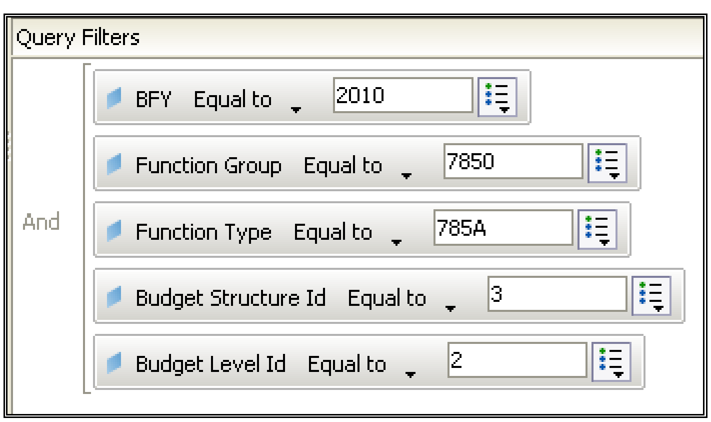
Task Overview

Use the *General Accounting Universe* to bring in *Expenditures* and *Encumbrances* and the *Budget Execution – KY Universe* to bring in *Allotments* to demonstrate merging universes.

1. Click **New > Web Intelligence Document** on the InfoAdvantage *Home Panel Toolbar*.
2. Click **General Accounting** from the list of universes. The *Query Panel* opens in the *Workspace Panel*.
3. For Query 1 drag: ***BFY, Fiscal Quarter, Cabinet, Fund Type, Function Group, Function Type, CAFR Fund Type, Closing Classification,*** and ***Posting Amount*** to the ***Result Objects*** panel.
4. Create the following ***Query Filters*** for Query 1:



5. Click on ***Add Query*** and create a second query from the *Budget Execution – KY* universe.
6. For Query 2 drag ***BFY, Allotment Period Name, Cabinet, Fund Type, Function Group, Function Type, CAFR Fund Type,*** and ***Allotment Line Amount Signed*** to the ***Result Objects Panel*** for Query 2:
7. Create the following ***Query Filters*** for Query 2:



8. Click on ***Edit Report*** to save the queries without running them.
9. Click **Merge Dimensions** to merge all like dimensions from Query 1 and Query 2.

    BFY – BFY

    Cabinet – Cabinet

    CAFR Fund Type – CAFR Fund Type

    Function Group – Function Group

    Function Type – Function Type

    Fund Type – Fund Type

    Fiscal Quarter – Allotment Period Name

10. Click ***Refresh All*** to run your report. Your report should be similar to the one below:

BFY	Fiscal Quarter	Cabinet	Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Posting Amount
2010	First	39	0100	7850	785A	GNRL	10	1,655,100.00	1,594,004.52
2010	First	39	0100	7850	785A	GNRL	11	1,655,100.00	0.00
2010	First	39	0100	7850	785A	GNRL	12	1,655,100.00	24,255.03
2010	First	39	1300	7850	785A	RSTD	10	260,900.00	201,702.20
2010	First	39	1300	7850	785A	RSTD	11	260,900.00	0.00
2010	First	39	1300	7850	785A	RSTD	12	260,900.00	0.00
2010	First	39	3700	7850	785A	RSTD	10	8,435,500.00	7,344,446.54
2010	First	39	3700	7850	785A	RSTD	11	8,435,500.00	0.00
2010	First	39	3700	7850	785A	RSTD	12	8,435,500.00	227,374.14
2010	Second	39	0100	7850	785A	GNRL	10	1,703,100.00	1,565,838.02
2010	Second	39	0100	7850	785A	GNRL	11	1,703,100.00	1,267.18
2010	Second	39	0100	7850	785A	GNRL	12	1,703,100.00	0.00
2010	Second	39	1200	7850	785A	FDRL	10	262,500.00	6,327.70
2010	Second	39	1300	7850	785A	RSTD	10	260,800.00	216,461.77
2010	Second	39	1300	7850	785A	RSTD	11	260,800.00	19.13
2010	Second	39	1300	7850	785A	RSTD	12	260,800.00	0.00
2010	Second	39	3700	7850	785A	RSTD	10	8,511,200.00	7,311,006.42

11. Remove ***BFY***, ***Cabinet***, and ***Fiscal Quarter*** from the report.

12. Add ***Allotment Line Amount Signed*** in front of ***Posting Amount*** if it's not there already.

13. Create **two flag and two measure variables**:

Expenditures Flag **=if([Closing Classification]="10" or [Closing Classification]="11"; "Yes"; "No")**
Expenditures **=[Posting Amount] Where ([Expenditures Flag]= "Yes")**

Encumbrances Flag =if([Closing Classification]="12"; "Yes"; "No")
Encumbrances **=[Posting Amount] Where ([Encumbrances Flag]= "Yes")**

14. Delete ***Posting Amount*** from the report and add the new measure variables after ***Allotment Line Amount Signed***.

15. Create a **break** on ***Fund Type.***

16. Uncheck ***Remove Duplicates***.

17. Insert **totals** for each *Measure* or *Variable*

18. Create Variables for ***Unexpended*** and ***Unobligated*** amounts and add them to your report.

Unexpended **=[Allotment Line Amount Signed]-[Expenditures]**

Unobligated **=[Allotment Line Amount Signed]-[Encumbrances]-[Expenditures]**

19. In ***View Structure***, add formulas to subtotal ***Unexpended*** and ***Unobligated*** in both the ***Break Footer*** and the ***Grand Total*** line.

Unexpended **=[Allotment Line Amount Signed]-Sum([Expenditures])**

Unobligated **=[Allotment Line Amount Signed]-Sum([Encumbrances])-Sum([Expenditures])**

Your final report should look similar to the report below:

Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures	Unexpended	Unobligated
0100	7850	785A	GNRL	10	5,554,800.00	0.00	3,702,406.20	1,852,393.80	1,852,393.80
0100	7850	785A	GNRL	11	5,554,800.00	0.00	1,533.15	5,553,266.85	5,553,266.85
0100	7850	785A	GNRL	12	5,554,800.00	24,255.03	0.00	5,554,800.00	5,530,544.97
0100				Sum:	5,554,800.00	24,255.03	3,703,939.35	1,850,860.65	1,826,605.62
Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures	Unexpended	Unobligated
1200	7850	785A	FDRL	10	262,500.00	0.00	22,111.99	240,388.01	240,388.01
1200				Sum:	262,500.00	0.00	22,111.99	240,388.01	240,388.01
Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures	Unexpended	Unobligated
1300	7850	785A	RSTD	10	1,043,400.00	0.00	482,794.79	560,605.21	560,605.21
1300	7850	785A	RSTD	11	1,043,400.00	0.00	306.30	1,043,093.70	1,043,093.70
1300	7850	785A	RSTD	12	1,043,400.00	0.00	0.00	1,043,400.00	1,043,400.00
1300				Sum:	1,043,400.00	0.00	483,101.09	560,298.91	560,298.91
Fund Type	Function Group	Function Type	CAFR Fund Type	Closing Classification	Allotment Line Amount Signed	Encumbrances	Expenditures	Unexpended	Unobligated
3700	7850	785A	RSTD	10	33,969,100.00	0.00	17,176,528.56	16,792,571.44	16,792,571.44
3700	7850	785A	RSTD	11	33,969,100.00	0.00	1,022.39	33,968,077.61	33,968,077.61
3700	7850	785A	RSTD	12	33,969,100.00	476,492.98	0.00	33,969,100.00	33,492,607.02
3700				Sum:	33,969,100.00	476,492.98	17,177,550.95	16,791,549.05	16,315,056.07
				Sum:	40,829,800.00	500,748.01	21,386,703.38	19,443,096.62	18,942,348.61

20. Save your report as ***Exercise 4 - Merging Data Providers - Your Name***.

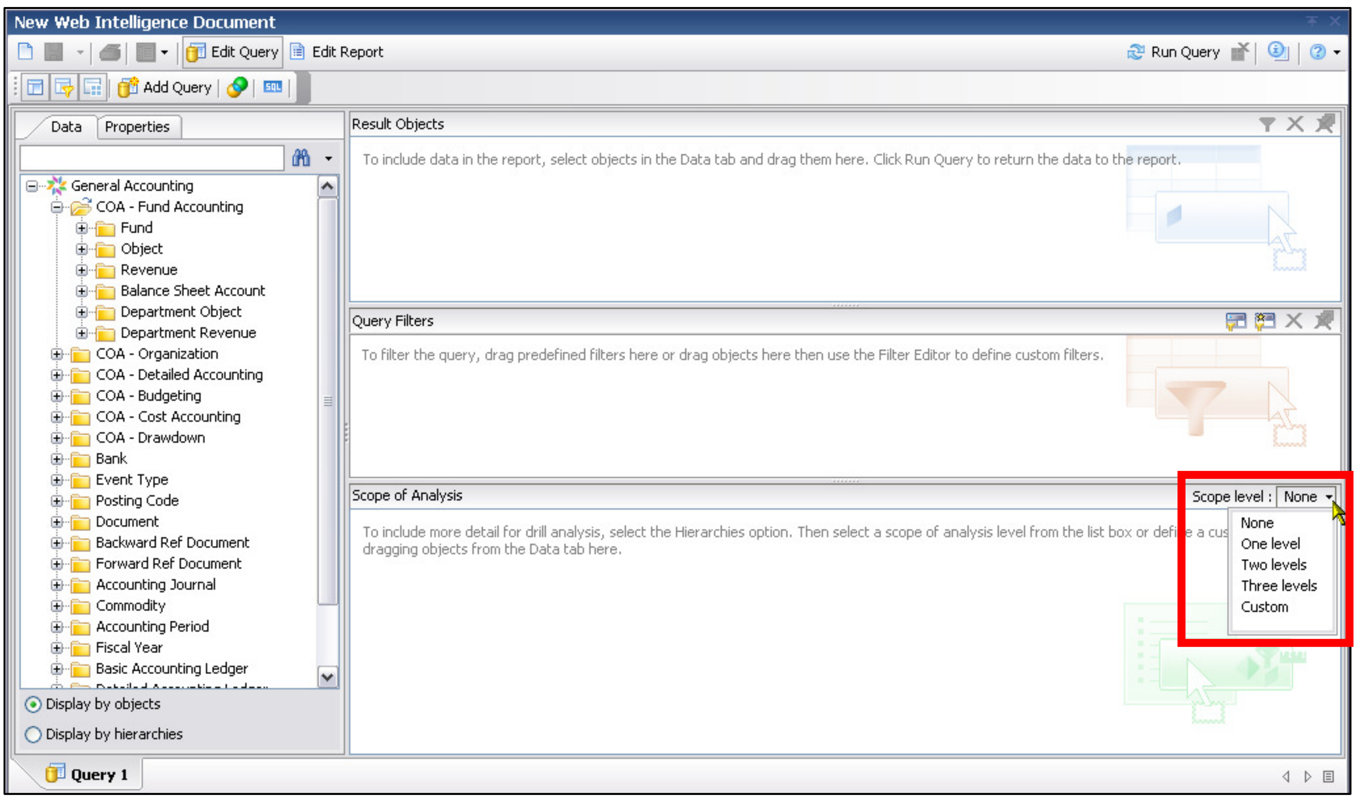
21. Close the *Report Panel* but **do not close or log out of infoAdvantage.**

Chapter 8: Scope of Analysis and Drilldown Functionality

Setting the Scope of Analysis

In a *Universe*, the objects within each class are usually represented in a hierarchy. The *Scope of Analysis* corresponds to the hierarchical levels below the object selected for a query. Setting the scope before running a query allows objects lower down the hierarchy to be included in the query, without them appearing in the *Result Objects Panel*. The query then retrieves extra data from the database to provide more details for each of the objects in a query.

The levels of scope consist of setting no scope (*None)*, setting the scope *One*, *Two* or *Three Levels* down into the hierarchy and setting a *Custom Scope*. With no scope, only the objects that appear in the *Result Objects Panel* are included in the query. When the scope is set to one, two or three levels down, for each object in the *Result* panel, one, two, or three objects lower down the hierarchy tree are included in the query. The data from these objects is stored in a *Data Cube* until you add them to the report. Setting a custom scope means that all objects added manually to the *Scope of Analysis Panel* are included in the query.



Query view showing how to set the scope of analysis and showing the Properties tab

Drill Down Functionality

Drilling on reports allows you to look deeper into the data to discover the details behind a summary result displayed in tables. You may drill up or down on tables and save the drilled results.

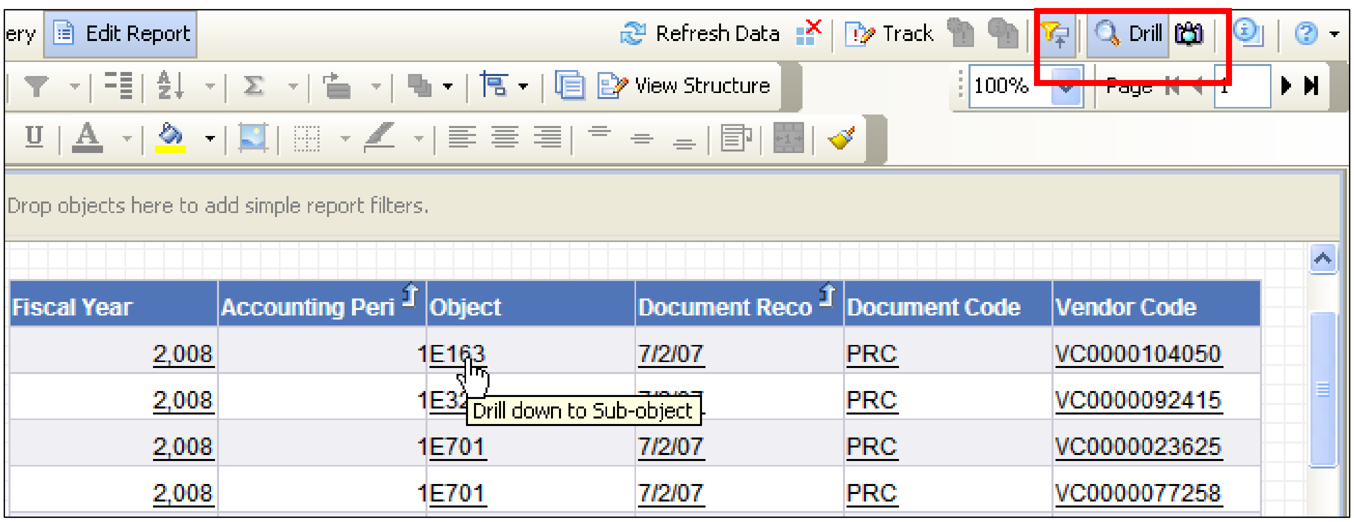
When analyzing data in drill mode, you move along a drill path. These paths are based on the *Dimension Object Hierarchies* in the universe. Objects in classes in a hierarchy have the most summarized objects at the top and the most detailed objects at the bottom. So if you want to make a high-level report, your query should include objects at the top of the list. If you want to see more detailed information, you may then switch to drill mode and drill down on each dimension value displayed in the report. Drill paths typically follow the same hierarchy order as the classes in a universe.

How to Drill Down

To drill down, make sure you are in drill mode by selecting the drill button. On the table or cell, place your pointer over the value on which you want to drill. A *ToolTip* appears, showing the next object in the drill path. When you click on the object, the table shows data from one level down.

The Drill button puts the report in drill mode.

Note the Tooltip showing that you will drill down to sub-object.



You drill up to see how the more detailed data aggregates to a higher-level result. When you drill up on a dimension value, you move along the drill path from lower to higher-level data. The drill up icon appears next to the name of each dimension from which you can drill up. Simply click this icon to drill up to the next level.

To end your drill session click the drill button in the toolbar. The drill toolbar is removed and the report is displayed in *Result* mode.

You may save your drilled results by either taking a snapshot  of the drilled report or saving the report while in drill mode. By taking a snapshot, which is a duplicate of the drilled report at that moment created, you can continue drilling in the original report. Saving the report while you are still in drill mode means that when you or another user re-opens the document, the report will open in drill mode.

Chapter 9: Session Summary

InfoAdvantage provides users with a way to gather select information from the eMARS database and put it into report form. The ability to create and modify custom reports is especially useful for those with advanced querying, reporting and analysis needs. You may create a custom report with any data that is available and format it in several ways to fit your requirements. Furthermore, the application is user friendly and easy to understand, making the creation of custom reports quick and manageable.

Choose from several universes to build a query specific to your needs. The objects in the universe represent the data you want to retrieve. Adding filters to your query may help pinpoint data and return more specific results. After the report has been run, format the report itself and the data to better understand the results.

Before infoAdvantage, only report developers were able to create reports for the Commonwealth's Agencies. Now, to the benefit of the Agencies, virtually anyone with appropriate access has the ability to build and run ad hoc reports. Expanding this capability to beyond the 100+ report developers is a great advantage to the Commonwealth and should enable the Agencies to become more efficient with their reporting.

Log Out of infoAdvantage and eMARS

You will conclude this class by logging out of the application.

1. Close the *Report Panel* and click **Logout** in infoAdvantage to close the application.
2. Click **Logout** in Advantage. This closes the Advantage 3 application and ends your session. You may now close the open browser windows.
3. Complete the *Class Evaluation*—instructions will be provided by the instructor.
4. **DO NOT SHUT DOWN YOUR COMPUTER.**
5. Please *Log Off*.

NOTE: Please remember to select *Logout* prior to closing your Advantage 3 session. Just closing the page will not immediately end your session.

Appendices

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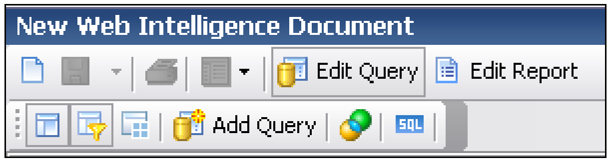
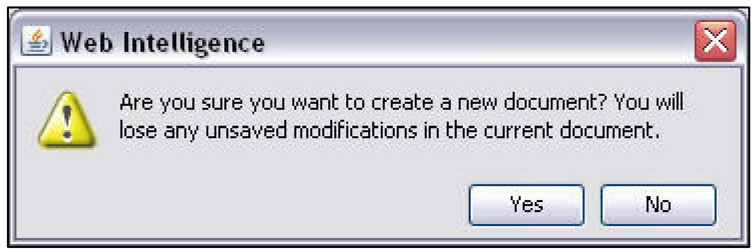
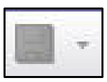
Appendix A
Query Panel Toolbars

Toolbar in Query View



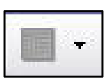
Create New Document - If you click on this icon, you will be asked "*Are you sure you want to create a new document*". If you click "Yes", *You will lose any unsaved modifications in the current document.*





Save - You may **not** save a query from within the *Query Panel.* That is why this option is grayed out. You must be in ***Edit Report*** in order to save your report document.

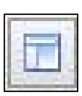
Export to PDF for Printing - You may **not** export from within the *Query Panel.* There is no data currently displayed for printing. That is why this option is grayed out.



Configure View – You may **not** use the *Configure View* icon within the *Query Panel*. That is why this option is grayed out.

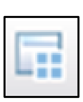
Edit Query - Once you run your query, you may switch from the *Report Panel* to the *Query Panel* to modify your query using this icon.

Edit Report - allows you to switch to the *Report Panel* without first running your query. This allows users to save their work prior to running the query in case there are problems that prevent saving (i.e. query times out, connection to server is lost, etc.)



Show/Hide Data Manager - shows or hides the universe classes and objects to the left of the *Query Panel*.

Show/Hide Filter Pane - shows or hides the *Query Filters Panel* that is located at the bottom of the *Query Panel*.



Show/Hide Scope of Analysis Pane - shows or hides the *Query Scope of Analysis Panel.* If shown this panel it will appear beneath the *Query Filters Panel*.

Add a New Query - allows you to add a new query with the option of using the same universe or another universe for query.

Add a Combined Query – allows you to add a *Union*, *Intersection*, or a *Minus* Query.

View SQL - *View SQL* will allow you to view the SQL that is created when the query is built. Viewing the SQL is an excellent way to troubleshoot problems with your report.

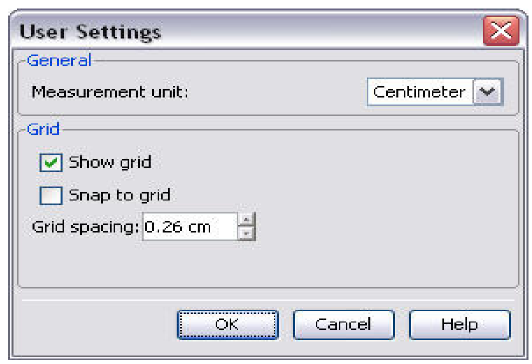
Note: Custom SQL is not utilized by the Commonwealth.

The other toolbar is at the top right of the *Query Panel*.

Run Query - will run your query and display the results in a report.

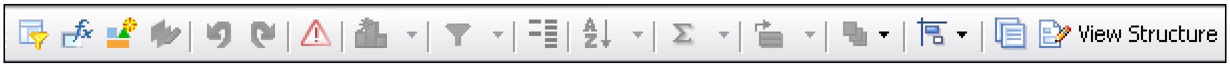
Purge Data - purges data from the report.

Show User Settings - will allow you to change the measurement unit on the report, and it will allow you to turn on/off the grid. In addition, you may set the objects to snap to the grid when placed on the report.

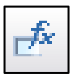


Help - gives you several options to choose from. Various types of help are available to you including online guides and lists of resources available on the web.

Appendix B
Report Panel Toolbars



Show/Hide Filter Pane – shows or hides the *Report Filters Applied to: Panel.*



Show/Hide Formula Toolbar – shows or hides the *Formula Toolbar* across the top of the *Report Panel*.

Variable Editor – displays the *Variable Editor*, which is a larger panel, used to create/edit variables.

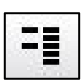
Merge Dimensions – allows you to link queries by merging like objects.

Undo and Redo Buttons – reverses or repeats the last action or series of actions taken.

Alerters - brings up the *Alerters* dialog box and allows you to apply an alerter to an object. This will allow you to put a specific condition on any object that will notify you if the condition is met.

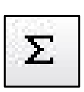
Apply/Remove Ranking – allows you to display the Top or Bottom values based on the dimension object that you have selected.

Add Filter – applies a quick filter to the table based on the object you select.



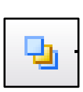
Insert/Remove Break – quick and easy way to insert or remove a break on an object in your report.

Apply/Remove Sort – allows you to apply or remove a sort on a select object.



Insert Calculation – allows you to insert a *Sum, Percentage, Min, Max, Average*, etc, on a selected *Measure*.

Insert Row/Column – allows you to insert a row above or below another row or a column before or after another column in your report.



Order – allows you to “Send to Back” or “Send to Front” the selected item.

Align Blocks and Cells - allows you to manipulate cell and block alignment.

Switch Page/Quick Display - shows the margins on the report.

Switch Between Results View and Structure View – allows you to view the raw table or the actual results in the report.

Refresh Data – allows you to refresh your report.

Purge Data – purges data from the report.

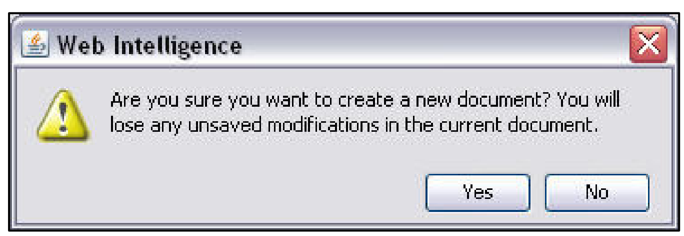
Activate Data Tracking – Not used by the Commonwealth.

Show/Hide Report Filter Toolbar – allows you to view any filters that have been added to the report.

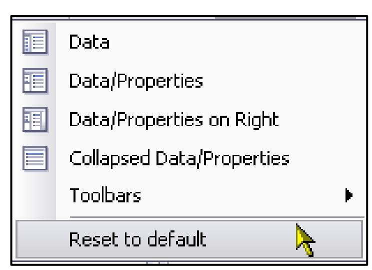
Drill – turns on the *Drill Mode* and allows for drilling down into the report.

Take Snapshot of Drilled Report – creates a report that is a snapshot of the drilled results.

Create New Document – If you click on this icon, you will be asked "*Are you sure you want to create a new document*". If you click "Yes", "*You will lose any unsaved modifications in the current document.*"



Save – allows you to save the report to *My Favorites* or *Public Folder* within infoAdvantage as defined by the users' security rights. **Save** also allows you to save to the report to your computer as an *Excel, PDF* or *CSV* file types.



Find Text on Current Page – allows you to search for text on the current page.

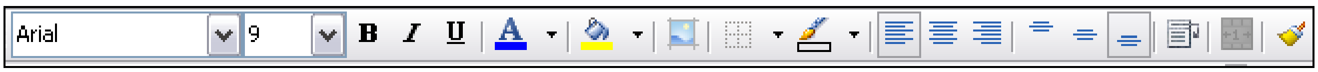
Configure View – allows you to configure the Java Report Panel and manage Toolbars.

Print this document - This option prints the report.

Edit Query – Takes you back to the *Query Panel for Editing*.

Edit Report – Takes you to the *Report Panel* if you are in the *Query Panel.*

Report Formatting Toolbar



Allows users to change a cells font ***Type and Size***

Allows users to ***Bold, Italicize***, or ***Underline*** selected cells

Allows users to change selected cells' ***Font Color***

Allows users to change selected cells' ***Background Color***

Allows users to insert a ***Background Image***

Allows users to change ***Borders*** of selected cells

Allows users to change the border color

Allows users to align text ***Left, Center, or Right***

Allows users to align text ***Top, Middle, or Center***

Allows users to ***wrap text***

Allows users to ***Merge or Split selected cells***

Allows users to ***copy cell formatting*** to other cells

Page Navigation Toolbar:

Allows users to navigate forward or backward a page at a time; or to the beginning or end of the report.

Report Manager Tabs

Data Tab Shows the objects selected in your query and any variables or formulas in your report.

Templates Tab Allows user to change the layout of the table, insert graphs or charts, or insert freestanding cells (*Formula* and *Text Cells* or *Page Number Cells*).

Properties Tab Allows you to make various changes to *Table, Cell* or *Report Properties* and manage *Sections* and *Breaks*. Upon review, you will find the *Properties Tab* will help with formatting and modifying your report.

Map Tab Maps the layout of the report.

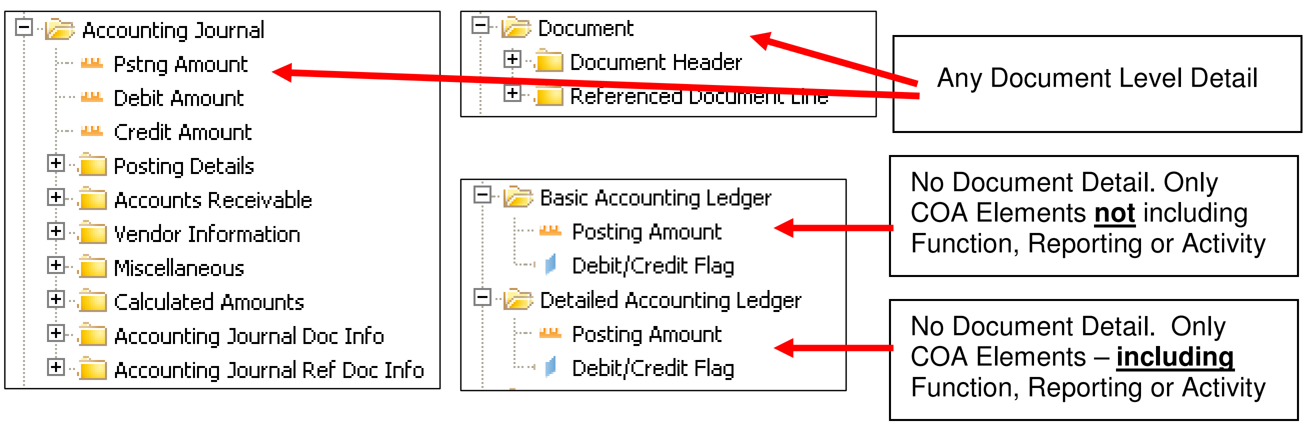
Appendix C
Accounting Journal vs. Summary Ledgers

Document Catalog

Summary Ledgers

Accounting Journal

Knowing where to pull data from is vital to report performance.



Pulling *Dimension, Detail* or *Measure Objects* from the wrong classes can cause reports to run longer than they have to. It is important to understand the major *Classes* (*Folders*) within the *General Accounting Universe* in order to properly build your reports.

Classes within a *Universe* contain objects that represent data in a table *behind the scenes.* Two of the largest tables in the *General Accounting Universe* that require our attention are the ***FACT_DOC_HDR*** table, which the *Document Class* references, and the ***FACT_JRNL_ACTG*** table, which the *Accounting Journal Class* references. Keep in mind that there are many tables referenced *behind the scenes* in a *Universe*, but the two tables previously mentioned are by far the largest because they contain document level detail.

The summary ledgers: ***SMRY_LDGRA*** and ***SMRY_LDGRB***; are referenced by the *Basic Accounting Ledger* and the *Detailed Accounting Ledger*. The summary ledger utilized in the SQL of the query depends entirely on *Dimension Objects* used in your query. A list of acceptable objects to use when reporting from the summary ledgers may be found at the end of this document.

Rule of thumb for deciding where to pull *Dimension, Detail* or *Measure Objects* is as such:

1. If you need document level detail, *always* start with the *Accounting Journal Class*.
   a. Pull all *Objects* from the class including *Posting Details,* such as *Document Record Date,* and referenced documents, found in *Accounting Journal Ref Doc Info*.
   b. If you use *Accounting Journal Class,* only pull objects from the *Document Class* when absolutely necessary for your reporting needs.
   c. *Do not* pull *Posting Amount* from either *Basic* or *Detailed Accounting Ledger,* instead pull *Pstng Amount* from the *Accounting Journal Class*.
2. If you must use the *Document Class*, do not use the *Accounting Journal Class* unless it is absolutely necessary (i.e. you need elements that are not in the *Document Class*)
3. If you *do not need* document level detail or any of the *Dimension, Detail* or *Measure Objects* found in the *Accounting Journal Class* or *Document Class*, pull *Posting Amount* from one of the *Accounting Ledger Classes*; because, summary ledgers only contain rollup information.

Summary Ledgers

Business Objects/infoAdvantage will decide the appropriate summary ledger to pull data from (*SMRY_LDGRA* or *SMRY_LDGRB*) depending on the *Objects* you use in your query. If you need a report that shows document level detail, you have to use either the *Accounting Journal Class* or the *Document Class.* However, if you do not need document level detail, you may use either the *Basic* or *Detailed Accounting Ledger* to pull *Posting Amount*.

If you decide you do not need document level detail and use *Posting Amount* from either the *Basic* or *Detailed Accounting Ledger Class,* you need to make sure you only use *Dimension Objects* and their corresponding *Detail Objects* in your query that are listed in this document.

Basic Accounting Ledger* or *Detailed Accounting Ledger

Budget Fiscal Year > ***BFY***

Fiscal Year > ***Fiscal Year***

Accounting Period > ***Accounting Period***
Accounting Period > ***Fiscal Year***
Accounting Period > ***Fiscal Quarter***

COA-Fund Accounting > Fund > ***Fund***
COA-Fund Accounting > Fund > ***Sub-Fund***
COA-Fund Accounting > Fund > ***Close into Account***
COA-Fund Accounting > Fund > ***Capital Asset Fund***
COA-Fund Accounting > Fund > ***Responsibility Center Posting Flag***
COA-Fund Accounting > Fund > ***Ovrd Responsibility Ctr Post Flag***
COA-Fund Accounting > Fund > ***Master Bank Account***
COA-Fund Accounting > Fund Hierarchy > ***Fund Class***
COA-Fund Accounting > Fund Hierarchy > ***Fund Category***
COA-Fund Accounting > Fund Hierarchy > ***Fund Type***
COA-Fund Accounting > Fund Hierarchy > ***Fund Group***
COA-Fund Accounting > CAFR Fund > ***CAFR Fund Type***
COA-Fund Accounting > CAFR Fund > ***CAFR Fund Group***
COA-Fund Accounting > CAFR Fund > ***Major Fund***

COA-Fund Accounting > CAFR Fund > ***Component Unit***
COA-Fund Accounting > Object > ***Object***
COA-Fund Accounting > Object > ***Sub-Object***
COA-Fund Accounting > Object > Object Hierarchy > ***Object Class***
COA-Fund Accounting > Object > Object Hierarchy > ***Object Category***
COA-Fund Accounting > Object > Object Hierarchy > ***Object Type***
COA-Fund Accounting > Object > Object Hierarchy > ***Object Group***
COA-Fund Accounting > Object > CAFR Expense Type > ***Major CAFR Expense Type***
COA-Fund Accounting > Object > CAFR Expense Type > ***Minor CAFR Expense Type***
COA-Fund Accounting > Object > Object Indicators > ***Reimbursable Flag***
COA-Fund Accounting > Object > Object Indicators > ***Reimbursable Eligible Flag***
COA-Fund Accounting > Object > Object Indicators > ***FASB Class***
COA-Fund Accounting > Object > Object Indicators > ***Operational Flag***
COA-Fund Accounting > Object > Object Indicators > ***Payroll Flag***
COA-Fund Accounting > Object > Object Indicators > ***Intercept Flag***
COA-Fund Accounting > Object > Object Indicators > ***1099 Income Code***
COA-Fund Accounting > Object > Object Indicators > ***Sub-object 1099 Income Code***

COA-Fund Accounting > Revenue > ***Revenue Source***
COA-Fund Accounting > Revenue > ***Sub-Revenue Source***
COA-Fund Accounting > Revenue > ***Revenue Source FASB Code***
COA-Fund Accounting > Revenue Source Hierarchy > ***Revenue Source Class***
COA-Fund Accounting > Revenue Source Hierarchy > ***Revenue Source Category***
COA-Fund Accounting > Revenue Source Hierarchy > ***Revenue Source Type***
COA-Fund Accounting > Revenue Source Hierarchy > ***Revenue Source Group***
COA-Fund Accounting > CAFR Revenue > ***Major CAFR Revenue Type***
COA-Fund Accounting > CAFR Revenue > ***Minor CAFR Revenue Type***
COA-Fund Accounting > Balance Sheet Account > ***BSA***
COA-Fund Accounting > Balance Sheet Account > ***Sub-BSA***
COA-Fund Accounting > Balance Sheet Account > ***BSA Account Type***
COA-Fund Accounting > Balance Sheet Account > ***Offset BSA***
COA-Fund Accounting > Balance Sheet Account > ***Sub-Offset BSA***
COA-Fund Accounting > Balance Sheet Account > BSA Hierarchy > ***BSA Class***
COA-Fund Accounting > Balance Sheet Account > BSA Hierarchy > ***BSA Category***
COA-Fund Accounting > Balance Sheet Account > BSA Hierarchy > ***BSA Type***
COA-Fund Accounting > Balance Sheet Account > BSA Hierarchy > ***BSA Group***
COA-Fund Accounting > Balance Sheet Account > CAFR BSA > ***Major CAFR BSA Group***
COA-Fund Accounting > Balance Sheet Account > CAFR BSA > ***Minor CAFR BSA Group***
COA-Fund Accounting > Balance Sheet Account > BSA Indicators > ***1099 Type of Income***
COA-Fund Accounting > Balance Sheet Account > BSA Indicators > ***BSA FASB Class***
COA-Fund Accounting > Balance Sheet Account > BSA Indicators > ***BSA Memo Account***
COA-Fund Accounting > Balance Sheet Account > BSA Indicators > ***BSA Cash Account***
COA-Fund Accounting > Balance Sheet Account > BSA Indicators > ***BSA Payroll Account***

COA-Fund Accounting > Department Object > ***Department Object***
COA-Fund Accounting > Department Object Hierarchy > ***Dept Object Class***
COA-Fund Accounting > Department Object Hierarchy > ***Dept Object Category***
COA-Fund Accounting > Department Object Hierarchy > ***Dept Object Type***
COA-Fund Accounting > Department Object Hierarchy > ***Dept Object Group***

COA-Fund Accounting > Department Revenue > ***Dept Revenue Source***
COA-Fund Accounting > Department Revenue Source Hierarchy > ***Dept Revenue Source Class***
COA-Fund Accounting > Department Revenue Source Hierarchy > ***Dept Revenue Source Category***
COA-Fund Accounting > Department Revenue Source Hierarchy > ***Dept Revenue Source Type***
COA-Fund Accounting > Department Revenue Source Hierarchy > ***Dept Revenue Source Group***

COA-Organization > Organization-Centralized View > ***Government Branch***
COA-Organization > Organization-Centralized View > ***Cabinet***
COA-Organization > Organization-Centralized View > ***Department***

COA-Organization > Organization-Decentralized View > ***Division***
COA-Organization > Organization-Decentralized View > ***Group***
COA-Organization > Organization-Decentralized View > ***Section***
COA-Organization > Organization-Decentralized View > ***District***
COA-Organization > Organization-Decentralized View > ***Bureau***
COA-Organization > Organization-Decentralized View > ***Unit***
COA-Organization > Organization-Decentralized View > ***Sub-Unit***

COA-Organization > Flex Reporting > ***Flex Reporting 1***
COA-Organization > Flex Reporting > ***Flex Reporting 2***
COA-Organization > Flex Reporting > ***Flex Reporting 3***
COA-Organization > Flex Reporting > ***Flex Reporting 4***
COA-Organization > Flex Reporting > ***Flex Reporting 5***

COA-Budgeting > Appropriation > ***Appropriation***
COA-Budgeting > Appropriation > ***Appropriation Classification***
COA-Budgeting > Appropriation > Appropriation Hierarchy > ***Appropriation Class***
COA-Budgeting > Appropriation > Appropriation Hierarchy > ***Appropriation Category***
COA-Budgeting > Appropriation > Appropriation Hierarchy > ***Appropriation Type***
COA-Budgeting > Appropriation > Appropriation Hierarchy > ***Appropriation Group***

Posting Code > ***Posting Code***
Posting Code > ***Closing Classification***
Posting Code > Update/Posting Rules > ***CBAL Update***
Posting Code > Update/Posting Rules > ***FBAL Update***
Posting Code > Update/Posting Rules > ***Expense Budget***
Posting Code > Update/Posting Rules > ***Expense Bucket ID***
Posting Code > Update/Posting Rules > ***Revenue Budget***
Posting Code > Update/Posting Rules > ***Revenue Bucket ID***
Posting Code > Update/Posting Rules > ***Code Type***
Posting Code > Classifications > ***Overhead Process***
Posting Code > Classifications > ***Cost Allocation Process***
Posting Code > Classifications > ***Funding Split***

Detailed Accounting Ledger

COA-Detailed Accounting > Activity > ***Activity***
COA-Detailed Accounting > Activity > ***Sub-Activity***
COA-Detailed Accounting > Activity Hierarchy > ***Activity Class***
COA-Detailed Accounting > Activity Hierarchy > ***Activity Category***
COA-Detailed Accounting > Activity Hierarchy > ***Activity Type***
COA-Detailed Accounting > Activity Hierarchy > ***Activity Group***
COA-Detailed Accounting > CAFR Activity > ***CAFR Activity Unit***
COA-Detailed Accounting > CAFR Activity > ***Major CAFR Activity***
COA-Detailed Accounting > CAFR Activity > ***Minor CAFR Activity***

COA-Detailed Accounting > Function > ***Function***
COA-Detailed Accounting > Function > ***Sub-Function***
COA-Detailed Accounting > Function Hierarchy > ***Function Class***
COA-Detailed Accounting > Function Hierarchy > ***Function Category***
COA-Detailed Accounting > Function Hierarchy > ***Function Type***
COA-Detailed Accounting > Function Hierarchy > ***Function Group***

COA-Detailed Accounting > Reporting > ***Reporting***
COA-Detailed Accounting > Reporting > ***Sub-Reporting***
COA-Detailed Accounting > Reporting Hierarchy > ***Reporting Class***
COA-Detailed Accounting > Reporting Hierarchy > ***Reporting Category***
COA-Detailed Accounting > Reporting Hierarchy > ***Reporting Type***
COA-Detailed Accounting > Reporting Hierarchy > ***Reporting Group***

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Appendix D
Closing Classifications

Closing Classification	Closing Classification Name
1	Asset Roll Forward
2	Liability Roll Forward
3	Equity Roll Forward
4	Contra Asset Roll Forward
5	Cash Roll Forward
6	Accounts Left In Old Year
7	Equity Offsets Closed To Net Assets
10	Cash Expenditures
11	Accrued Expenditures
12	Encumbrances
13	Pre Encumbrances
14	Collected Revenue
15	Billed Revenue

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Appendix E
Budget Structure and Level ID

Budget Structure Id	Budget Structure Name
3	KY Expense Budget
39	Reimbursable Grant Budget
42	Revenue Budget
43	Capital Projects

Budget Level Id	Budget Level Name
1	Appropriation
1	Dept/Majr Prog/Prog/Period/Fund Prfl/Fund Prty
1	Fund/Dept
1	Fund/Dept/Appr Unit
2	Allotment Program
2	Dept/Majr Prog/Prog/Period/Fund Prfl/Fund Prty/Fund Line
2	Fund/Dept/Appr Unit/Bureau/Object
2	Fund/Dept/Rev Src
3	Object

Budget Structure Id	Structure Name	Budget Level Id	Budget Level Name
3	KY Expense Budget	1	Appropriation
3	KY Expense Budget	2	Allotment Program
3	KY Expense Budget	3	Object
39	Reimbursable Grant Budget	1	Dept/Majr Prog/Prog/Period/Fund Prfl/Fund Prty
39	Reimbursable Grant Budget	2	Dept/Majr Prog/Prog/Period/Fund Prfl/Fund Prty/Fund Line
42	Revenue Budget	1	Fund/Dept
42	Revenue Budget	2	Fund/Dept/Rev Src
43	Capital Projects	1	Fund/Dept/Appr Unit
43	Capital Projects	2	Fund/Dept/Appr Unit/Bureau/Object

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Appendix F
Posting Codes

Posting Code	Posting Code Name
A001	Cash
A002	Due To Fund
A003	Due From Fund
A004	Bond Revenue
A005	Bonds Payable
A008	Long Term Debt Payable
A009	Expenditure Offset for Pre-Paid Asset
A010	Amount To Be Provided
A011	Undistributed Receipts
A012	Payroll Payable
A013	Reserve for Payroll Encumbrances
A014	Generic Equity
A015	Generic Liability
A016	Generic Asset
A017	Operating Transfer Out
A018	Operating Transfer In
A019	Internal Loans Receivable
A020	Internal Loans Payable
A021	Contributed to Fixed Assets
A022	Bond Payable Offset
A023	Expense
A024	Pre Paid Assets
A025	Accrued Operating Transfer Out
A026	Accrued Operating Transfer In
A027	Bond Discount/Premium
A028	Bank Transfer Cash
A100	Accrued Expenditure Close
A101	Cash Expenditure Close
A102	Billed Revenue Close
A103	Collected Revenue Close
A104	Pre Encumbrance Close
A105	Encumbrance Close
A106	Asset Close
A107	Cash Close
A108	Liability Close

Posting Code	Posting Code Name
A109	Equity Close
A110	Asset Offset Close
A111	Equity Offset Close
A150	Memo Account 1 for Lapse
A151	Memo Account 2 for Lapse
A200	Fund Balance
A201	Retained Earnings
A202	Agency Due To
A203	Net Assets
A204	Annual Close Offset
B001	Expenditure Budget - Adoption
B002	Expenditure Budget - Amendment
B003	Expenditure Budget - Carry Forward
B004	Expenditure Budget - Transfer In
B005	Expenditure Budget - Transfer Out
B006	Revenue Budget - Expected
B007	Expenditure Budget - Allocation
B008	Expenditure Budget - Reversion
B009	Reimbursable Budget - Award
B010	Revenue Budget - Adoption
B011	Revenue Budget - Allocation
B012	Revenue Budget - Amendment
B013	Revenue Budget - Carry Forward
B014	Revenue Budget - Reversion
B015	Revenue Budget - Transfer Out
B016	Revenue Budget - Transfers
B017	Stand In Code for Budgeting
B018	Expected Revenue
B019	Amend Expected Revenue
C001	Standard Charge
C002	Back End Split Charge
C003	Revenue Credit
D001	Disbursement Payable
D003	Retainage Payable
D004	Stale Payable Cash
D005	Escheat Payable Cash
D006	Use Tax Payable
D007	Warrant Payable
D008	Stale Warrants Payable

Posting Code	Posting Code Name
D009	Escheat Warrants Payable
D010	Backup Withholding Payable
D011	External Accrued Expenditure / Expense
D012	Accrued Bond Principle Expense
D013	Cash Expenditure/Expense - Warrants
D014	External Cash Expenditure/Expense
D015	Cash Bond Principle Expenditure/Expense
D017	Warrant Clearing Cash
D018	Warrant Clearing Payable
D019	Cancelled Disbursement Payable
D021	Inventory Accrued Expenditure / Expense
D022	Inventory Cash Expenditure/Expense
D023	Cost of Goods Sold
D024	Internal Accrued Expenditure / Expense
D025	Internal Cash Expenditure/Expense
D090	Checkwriter 1099 Posting
D091	Check Writer
D0W7	Warrant Payable
D101	Stale Payable Disbursement
D102	Escheat Payable Disbursement
D201	Intercept Payable
D202	Intercepted Cash
F001	Pending Fixed Asset
F002	Fixed Asset
F004	Due To Fund - Fixed Asset Internal Sales
F005	Due From Fund - Fixed Asset Internal Sales
F010	Expense Offset for Fixed Asset
F011	Contributed to Fixed Assets
F012	Net Adjustment to Fixed Assets
F020	Depreciation Expense
F021	Gain/Loss Expense from Sale of Fixed Asset
F022	Internal Expense from Fixed Asset Exchange
F030	Sale of Fixed Asset Revenue
F031	Gain/Loss Revenue from Sale of Fixed Asset
F032	Internal Revenue from Fixed Asset Exchange
F040	Accumulated Depreciation
H001	Accrued Payroll
H002	Net Pay
H003	Deduction

Posting Code	Posting Code Name
H004	Reserved Pay
H005	Fringe
H006	Accrued Leave
I001	Investment Cash
I002	Investments
I003	Investment Discounts
I004	Investment Premiums
I005	Accrued Interest Receivable
I006	Investment Interest Revenue
I007	Investment Equity
M001	Memo Asset
M002	Offset for Memo Fixed Asset
M003	Accumulated Depreciation - Memo Asset
OB01	Obligation entry
P001	Procurement Non-Accounting Nominal
P002	Procurement Non-Accounting Offset
P003	Pre Encumbrance
P004	Reserve for Pre Encumbrance
P005	Encumbrance
P006	Reserve for Encumbrance
P010	Memo Pre Encumbrance
P011	Reserve for Memo Pre Encumbrance
P012	Memo Encumbrance
P013	Reserve for Memo Encumbrance
R001	Billed Earned Receivable
R002	External Billed Earned Revenue
R003	External Collected Earned Revenue
R004	Billed Earned Receivable Sent for Collection
R005	Billed NSF Revenue
R006	Collected NSF Revenue
R007	Bad Debt Expense
R008	Allowance for Bad Debt
R009	Earned Receivable
R010	Earned Revenue
R021	Inventory Accrued Revenue
R022	Inventory Collected Revenue
R023	Internal Accrued Revenue
R024	Internal Collected Revenue
R100	Billed Unearned Receivable

Posting Code	Posting Code Name
R101	Billed Unearned Revenue
R102	Collected Unearned Revenue
R103	Unearned Receivable Write Off
R104	Unearned Revenue Write Off
R105	Unearned Revenue for Pre Payment
R200	Billed Deposit Receivable
R201	Billed Deposit
R202	Collected Deposit
R203	Deposit Receivable Write Off
R204	Deposit Write Off
R300	Billed Vendor Refund Receivable
R301	Expenditure Refund Holding Account
R304	Billed Vendor Refund Sent for Collection
R305	Vendor Refund Receivable Write Off
R306	Vendor Refund Write Off
R400	Reserved Overpayment
R401	Unreserved Overpayment
S001	Inventory/Stock Items
S002	Inventory/Stock Offset
S003	Inventory/Stock Due To Fund
S004	Inventory/Stock Due From Fund
S005	Inventory Adjustment Expense
XJV1	Off-Bud Operating Transfer Out
XR03	External Collected Earned Revenue Refund
XTE1	Travel Non-Accounting Nominal
XTE2	Travel Non-Accounting Offset
XX03	Conv External Collected Earned Revenue
XX14	Conv External Cash Expenditure/Expense
XX17	Conv Off-Bud Operating Transfer Out
XXCO	Standard Charge-Offset
XXEX	Conversion Exp PSCD
XXP3	Standard Charge-Non Reim
XXPI	Program Income
XXRV	Conversion Rev PSCD
XXX3	Conv External Collected Earned Revenue
XXXX	Conversion Offset

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Appendix G
Event Types

Event Types Used in Budget Universe

Code	Name
Operating	
X001	Regular Budget
X002	Continued Budget
X003	Special Budget
X004	Budget Revision Due to Reorganization
X005	Necessary Government Expense
X006	Current Year Appropriation
X007	Surplus Expenditure Plan
X008	Salary and Health Insurance
X009	Budget Reduction Revision
X010	Other Budget Revision
X011	Tobacco Settlement- Phase 1
Capital	
X050	Maintenance Pool Appropriation
X060	Appropriation from Non Maintenance Pool
X070	Appropriation - Heritage Land Conservation
X080	Appropriation- Coal Severance Tax
X500	Capital Construction Equipment Purchase Contigency Fund
X600	Emergency Repair Maintenance and Replacement
X640	Statewide Deferred Maintenance Fund
X666	Backout for Closed Projects
XCAP	Capital Project Allotment

Event Type	Event Type Name
AP01	Authorize Normal Payment
AP02	Authorize Pre Payment
AP03	Authorize Retainage Payment
AP04	Authorize Use Tax Payment
AP05	Authorize Backup Withholding Payment
AP06	Authorize Deposit Refund
AP07	Authorize Prepayment Refund
AP08	Authorize Unreserved Credit Balance Refund
AP09	Authorize Reserved Credit Balance Refund
AP10	Authorize Earned Revenue Refund
AP11	Authorize Stale Payment

Event Type	Event Type Name
AP12	Authorize Escheat Payment
AP13	Authorize Bond Principal Payment
AP14	Forfeiture of Retainage to Expenditure
AP15	Forfeiture of Retainage to Undistributed Receipts
AP16	Equity Payout Authorization
AP17	Liability Payout Authorization
AP18	Asset Payout Authorization
AP19	Authorize Bond Interest Payment
AR01	Bill Earned Revenue
AR02	Collect Earned Revenue
AR03	Write Off Earned Revenue - Direct Method
AR04	Write Off Earned Revenue - Allowance Method
AR05	Refer Earned Receivable to Collection Agency
AR06	Accrue Earned Revenue
AR10	Bill Unearned Revenue
AR11	Collect Unearned Revenue
AR12	Write Off Unearned Revenue
AR13	Collect Pre Payment
AR20	Bill Deposit
AR21	Collect Deposit
AR22	Write Off Deposit
AR30	Bill Vendor Refund - Budgetary
AR31	Bill Vendor Refund - Non Budgetary
AR32	Collect Vendor Refund
AR33	Write Off Vendor Refund
AR34	Refer Vendor Refund to Collection Agency - Budgetary
AR35	Refer Vendor Refund to Collection Agency - Non Budgetary
AR40	Collect Unreserved Overpayment
AR41	Collect Reserved Overpayment
AR50	Bill to Asset Account
AR51	Collect to Asset Account
AR52	Bill to Liability Account
AR53	Collect to Liability Account
AR54	Bill to Equity Account
AR55	Collect to Equity Account
BG01	Adopt An Expense Budget
BG02	Allocate An Expense Budget
BG03	Amend An Expense Budget
BG04	Carry Forward An Expense Budget
BG05	Revert An Expense Budget

Event Type	Event Type Name
BG06	Transfer In An Expense Budget
BG07	Transfer Out An Expense Budget
BG08	Deactivate Budget Line
BG09	Activate Budget Line
BG10	Delete Budget Line
BG21	Estimate Expected Revenue
BG22	Award Reimbursable Budget
BG23	Adopt a Revenue Budget
BG24	Allocate A Revenue Budget
BG25	Amend A Revenue Budget
BG26	Carry Forward A Revenue Budget
BG27	Revert A Revenue Budget
BG28	Transfer A Revenue Budget
BG29	Transfer Out A Revenue Budget
BG30	Appropriation Expected Revenue
BG31	Amend Appropriation Expected Revenue
CA01	Expenditure Allocation
CA02	Revenue Allocation
CA03	Allocation Inverse
CG01	Record Standard Program Charge
CG02	Record Back End Split Program Charge
CG03	Record Revenue Credit
CW01	Check Writer Intercept
DI01	Pay Expenditure by Check - Automatically
DI02	Pay Expenditure by Warrant - Automatically
DI03	Pay Expenditure by C.F. Warrant - Automatically
DI04	Pre Pay by Check - Automatically
DI05	Pre Pay by Warrant - Automatically
DI06	Pre Pay by C.F. Warrant - Automatically
DI07	Pay From Generic Asset by Check - Automatically
DI08	Pay From Generic Asset by Warrant - Automatically
DI09	Pay From Generic Asset by C.F. Warrant - Automatically
DI10	Pay From Generic Liability by Check - Automatically
DI11	Pay From Generic Liability by Warrant - Automatically
DI12	Pay From Generic Liability by C.F. Warrant - Automatically
DI13	Pay From Generic Equity by Check - Automatically
DI14	Pay From Generic Equity by Warrant - Automatically
DI15	Pay From Generic Equity by C.F. Warrant - Automatically
DI16	Payout Stale Disbursement by Check - Automatically
DI17	Payout Stale Disbursement by Warrant - Automatically

Event Type	Event Type Name
DI18	Payout Stale Disbursement by C.F. Warrant - Automatically
DI19	Payout Escheated Disbursement by Check - Automatically
DI20	Payout Escheated Disbursement by Warrant - Automatically
DI21	Payout Escheated Disbursement by CF Warrant - Automatically
DI22	Pay Use Tax by Check - Automatically
DI23	Pay Use Tax by Warrant - Automatically
DI24	Pay Use Tax by C.F. Warrant - Automatically
DI25	Pay Backup Withholding by Check - Automatically
DI26	Pay Backup Withholding by Warrant - Automatically
DI27	Pay Backup Withholding by C.F. Warrant - Automatically
DI28	Return Deposit by Check - Automatically
DI29	Return Deposit by Warrant - Automatically
DI30	Return Deposit by C.F. Warrant - Automatically
DI31	Return Prepayment by Check - Automatically
DI32	Return Prepayment by Warrant - Automatically
DI33	Return Prepayment by C.F. Warrant - Automatically
DI34	Return Unreserved Overpayment by Check - Automatically
DI35	Return Unreserved Overpayment by Warrant - Automatically
DI36	Return Unreserved Overpayment by CF Warrant - Automatically
DI37	Return Reserved Overpayment by Check - Automatically
DI38	Return Reserved Overpayment by Warrant - Automatically
DI39	Return Reserved Overpayment by C.F. Warrant - Automatically
DI40	Refund Earned Revenue by Check - Automatically
DI41	Refund Earned Revenue by Warrant - Automatically
DI42	Refund Earned Revenue by C.F. Warrant - Automatically
DI43	Payout Retainage by Check - Automatically
DI44	Payout Retainage by Warrant - Automatically
DI45	Payout Retainage by C.F. Warrant - Automatically
DI46	Payout Bond Principal by Check - Automatically
DI47	Payout Bond Principal by Warrant - Automatically
DI48	Payout Bond Principal by C.F. Warrant - Automatically
DI51	Pay Expenditure by Check - Manually
DI52	Pay Expenditure by Warrant - Manually
DI53	Pay Expenditure by C.F. Warrant - Manually
DI54	Pre Pay by Check - Manually
DI55	Pre Pay by Warrant - Manually
DI56	Pre Pay by C.F. Warrant - Manually
DI57	Pay From Generic Asset by Check - Manually
DI58	Pay From Generic Asset by Warrant - Manually
DI59	Pay From Generic Asset by C.F. Warrant - Manually

Event Type	Event Type Name
DI60	Pay From Generic Liability by Check - Manually
DI61	Pay From Generic Liability by Warrant - Manually
DI62	Pay From Generic Liability by C.F. Warrant - Manually
DI63	Pay From Generic Equity by Check - Manually
DI64	Pay From Generic Equity by Warrant - Manually
DI65	Pay From Generic Equity by C.F. Warrant - Manually
DI66	Payout Stale Disbursement by Check - Manually
DI67	Payout Stale Disbursement by Warrant - Manually
DI68	Payout Stale Disbursement by C.F. Warrant - Manually
DI69	Payout Escheated Disbursement by Check - Manually
DI70	Payout Escheated Disbursement by Warrant - Manually
DI71	Payout Escheated Disbursement by C.F. Warrant - Manually
DI72	Pay Use Tax by Check - Manually
DI73	Pay Use Tax by Warrant - Manually
DI74	Pay Use Tax by C.F. Warrant - Manually
DI75	Pay Backup Withholding by Check - Manually
DI76	Pay Backup Withholding by Warrant - Manually
DI77	Pay Backup Withholding by C.F. Warrant - Manually
DI78	Return Deposit by Check - Manually
DI79	Return Deposit by Warrant - Manually
DI80	Return Deposit by C.F. Warrant - Manually
DI81	Return Prepayment by Check - Manually
DI82	Return Prepayment by Warrant - Manually
DI83	Return Prepayment by C.F. Warrant - Manually
DI84	Return Unreserved Overpayment by Check - Manually
DI85	Return Unreserved Overpayment by Warrant - Manually
DI86	Return Unreserved Overpayment by C.F. Warrant - Manually
DI87	Return Reserved Overpayment by Check - Manually
DI88	Return Reserved Overpayment by Warrant - Manually
DI89	Return Reserved Overpayment by C.F. Warrant - Manually
DI90	Refund Earned Revenue by Check - Manually
DI91	Refund Earned Revenue by Warrant - Manually
DI92	Refund Earned Revenue by C.F. Warrant - Manually
DI93	Payout Retainage by Check - Manually
DI94	Payout Retainage by Warrant - Manually
DI95	Payout Retainage by C.F. Warrant - Manually
DI96	Payout Bond Principal by Check - Manually
DI97	Payout Bond Principal by Warrant - Manually
DI98	Payout Bond Principal by C.F. Warrant - Manually
DR01	Stale Cash/CF Warrant Disbursement

Event Type	Event Type Name
DR02	Stale Warrant Disbursement
DR03	Escheat Cash/CF Warrant Disbursement
DR04	Escheat Warrant Disbursement
DR05	Cancel Cash/CF Warrant Disbursement
DR06	Cancel Warrant Disbursement
DR07	Reclass Cash/CF Warrant as Cancelled D/P
DR08	Reclass Warrant as Cancelled D/P
DR09	Reclass Cash/CF Warrant as Revenue
DR10	Reclass Warrant as Revenue
DR11	Reclass Cash/CF Warrant as Equity
DR12	Reclass Warrant as Equity
DR20	Redeem C.F. Warrant
DR21	Redeem Regular Warrant
ED01	External Debt Intercept Transfer with Same Banks - Unearned
ED02	External Debt Intercept Transfer with Diff Banks - Unearned
FA01	Acquire a Fixed Asset
FA02	Better a Fixed Asset
FA03	Record Depreciation on an Individual Fixed Asset
FA04	Dispose of a Fixed Asset
FA05	Modify Fixed Asset Non-Accounting Attributes
FA06	Transfer a Fixed Asset
FA07	Change Value of Fixed Asset
FA08	Change Status of a Fixed Asset
FA09	Sale a Fixed Asset Internally
FA10	Increase Value from Shell
FA11	Cancellation of a Fixed Asset
FA12	Change Selling Price of a Fixed Asset
FA13	Mass Depreciation Fixed Assets
FA14	Unpend a Fixed Asset Shell
FA20	Non-Budgeted Fixed Asset Purchase
FA21	NB Fixed Asset Purchase by Check - Automatically
FA22	NB Fixed Asset Purchase by Warrant - Automatically
FA23	NB Fixed Asset Purchase by CF Warrant - Automatically
FA24	NB Fixed Asset Purchase by Check - Manually
FA25	NB Fixed Asset Purchase by Warrant - Manually
FA26	NB Fixed Asset Purchase by CF Warrant - Manually
FA27	Acquire a Fixed Asset Internally
FA28	Better a Fixed Asset Internally
GA01	Cash Expenditure Correction
GA02	Lapse Encumbrances & Pre Encumbrances

Event Type	Event Type Name
GA04	Establish Allowance for Bad Debt
GA05	Collected Earned Revenue Correction
GA06	Move Cancelled D/P into Revenue
GA10	Cash Transfer
GA13	Recongnize Expense From Prepayment
GA16	Collect Bond Proceeds
GA17	Record Bond Issuance Costs
GA18	Amortize Bond Discount/Premium
GA19	Accrue Bond Interest
GA20	Record Bond Liability
GA21	Reclassify Bond Premium/Discount
GA22	Bank Transfer
HR01	Accrue Payroll Expenditures
HR02	Record Net Pay
HR03	Record Deductions
HR04	Record Fringe Liability
HR05	Record Contract Pay
HR06	Accrue Leave Liability
HR07	Record Payroll Cash Expenditures
HR10	Record Net Pay to Clearing Fund w/Cash
HR11	Record Net Pay to Clearing Fund w/Clearing Accounts
HR12	Record Deductions to Clearing Fund w/Cash
HR13	Record Deductions to Clearing Fund w/Clearing Accounts
HR14	Record Fringe to Clearing Fund w/Cash
HR15	Record Fringe to Clearing Fund w/Clearing Account
HR20	Record & Request Expenditure Payment for Fringe - Oper Fund
HR21	Request Liability Payment for Fringe
HR22	Request Liability Payment for Deduction
HR23	Record & Request Liability Payment for Reserved Fringe
HR30	Pay Deductions by Check
HR31	Pay Deductions by Warrant
HR32	Pay Deductions by Clearing Fund Warrant
HR33	Pay Fringe Expenditure by Check
HR34	Pay Fringe Expenditure by Warrant
HR35	Pay Fringe Expenditure by Clearing Fund Warrant
HR36	Pay Fringe Expenditure by Check w/Adjustment 1
HR37	Pay Fringe Expenditure by Warrant w/Adjustment 1
HR38	Pay Fringe Expenditure by Clr Fund Warrant w/Adjustment 1
HR39	Pay Fringe Liability by Check
HR40	Pay Fringe Liability by Warrant

Event Type	Event Type Name
HR41	Pay Fringe Liability by Clearing Fund Warrant
HR50	Budget Set Aside for Payroll
HR60	Payroll Expenditure Correction Reinstatement
HR61	Reserve Contract Pay Correction Reinstatement
HR62	Payroll Expenditure Correction Reversal
HR63	Reserve Contract Pay Correction Reversal
HR64	Reinstate Payroll Correction to Liability
HR65	Reinstate Payroll Correction to Equity
HR66	Reinstate Payroll Correction to Revenue
HR70	Convert Net Pay to Cash
HR71	Convert Accrued Expenditure to Cash Expenditure
HR80	Deduction Liability Transfer w/Cash
HR81	Deduction Liability Transfer w/Clearing Accounts
HR82	Deduction Liability Transfer w/No Offsets
HR83	Deduction Liability to Revenue Transfer w/Cash
HR84	Deduction Liability to Revenue Transfer w/Clearing Accounts
HR85	Deduction Liability to Revenue Transfer w/No Offsets
HR86	Deduction Liability to Expense Transfer w/Cash
HR87	Deduction Liability to Expense Transfer w/Clearing Accounts
HR88	Deduction Liability to Expense Transfer w/No Offsets
HR90	Fringe Liability Transfer w/Cash
HR91	Fringe Liability Transfer w/Clearing Accounts
HR92	Fringe Liability Transfer w/No Offsets
HR93	Fringe Liability to Revenue Transfer w/Cash
HR94	Fringe Liability to Revenue Transfer w/Clearing Accounts
HR95	Fringe Liability to Revenue Transfer w/No Offsets
HR96	Fringe Liability to Expense Transfer w/Cash
HR97	Fringe Liability to Expense Transfer w/Clearing Accounts
HR98	Fringe Liability to Expense Transfer w/No Offsets
IE10	Intercept Transfer w/Same Banks - Earned
IE11	Intercept Transfer w/Diff Banks - Earned
IE12	Intercept Transfer w/Same Banks - Unearned
IE13	Intercept Transfer w/Diff Banks - Unearned
IE14	Intercept Transfer w/Same Banks - Deposit
IE15	Intercept Transfer w/Diff Banks - Deposit
IE16	Intercept Transfer w/Same Banks - Vendor Refund
IE17	Intercept Transfer w/Diff Banks - Vendor Refund
IF01	Default Fees Same Banks - Earned Revenue
IF02	Default Fees with Different Banks - Earned Revenue
IF03	Supplementary Fees Same Banks - Unearned Revenue

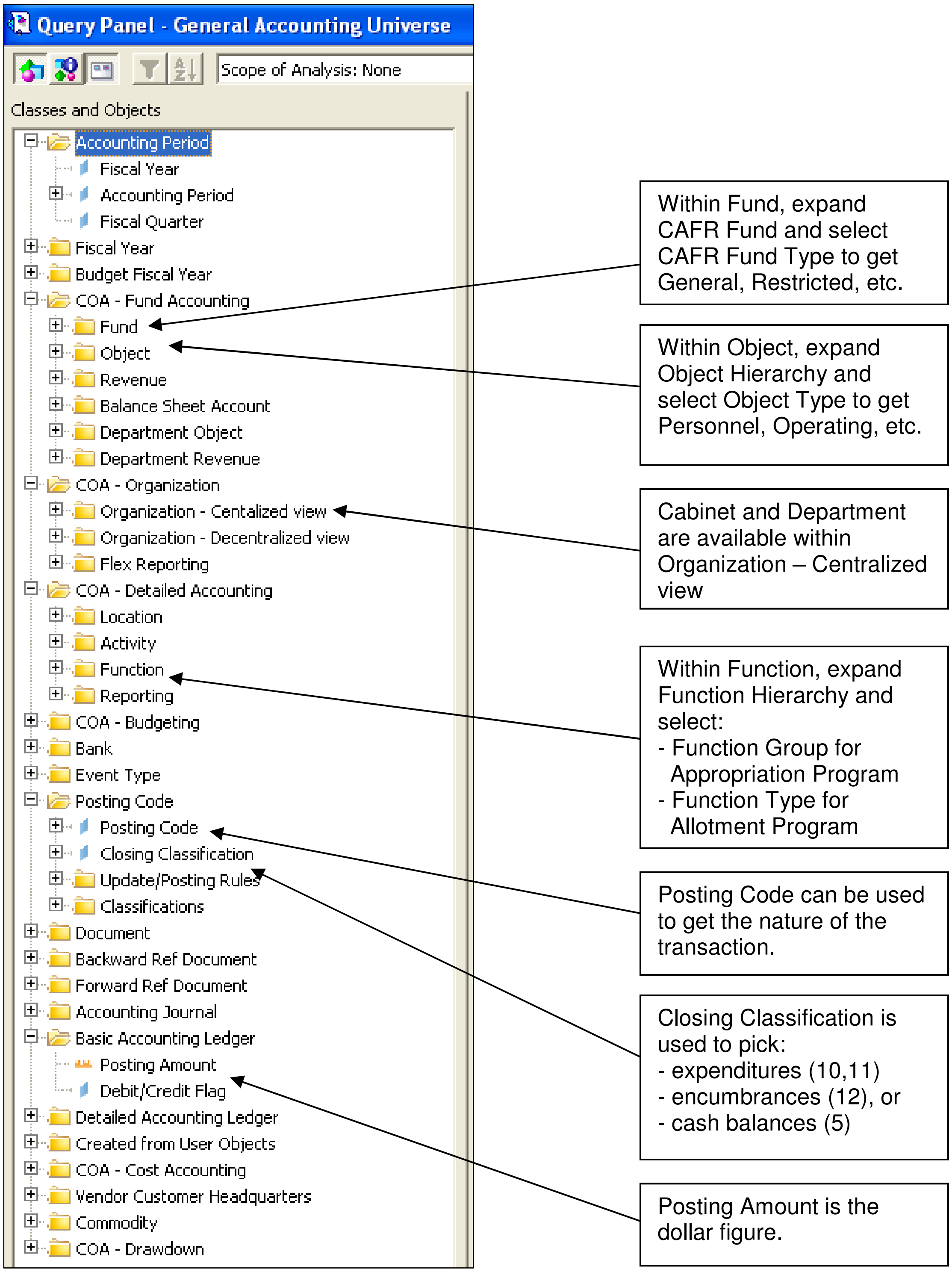
Event Type	Event Type Name
IF04	Supplementary Fees with Different Banks - Unearned Revenue
IN00	Internal External Event Type on Vendor Line
IN01	Inter Fund Reimbursement with Cash Offsets
IN02	Inter Fund Reimbursement with Non-Cash Offsets
IN03	Intra Fund Reimbursement
IN04	Inter Fund Quasi-External Transaction with Cash Offsets
IN05	Inter Fund Quasi-External Transaction with Non Cash Offsets
IN06	Intra Fund Quasi-External Transaction
IN10	Intercept Transfer w/Same Banks - Earned
IN11	Intercept Transfer w/Diff Banks - Earned
IN12	Intercept Transfer w/Same Banks - Unearned
IN13	Intercept Transfer w/Diff Banks - Unearned
IN14	Intercept Transfer w/Same Banks - Deposit
IN15	Intercept Transfer w/Diff Banks - Deposit
IN16	Intercept Transfer w/Same Banks - Vendor Refund
IN17	Intercept Transfer w/Diff Banks - Vendor Refund
IN20	Operational Transfer with Cash Offsets
IN21	Operational Transfer with Non Cash Offsets
IN22	Internal Loan
IN30	Internal Reimbursement Purchase with Cash
IN31	Internal Reimbursement Purchase with Clearing Accounts
IN32	Internal Quasi External Purchase with Cash
IN33	Internal Quasi External Purchase with Clearing Accounts
IV01	Record Investment
IV02	Record Investment Interest
IV03	Interest Allocation
IV04	Cash Sweep
PR01	Request - Non Accounting
PR02	Request from External Vendor - Accounting
PR03	Request from Internal Vendor - Accounting
PR04	Master Agreement - Non Accounting
PR05	Order from External Vendor - Accounting
PR06	Order from Internal Vendor - Accounting
PR07	Order - Non Accounting
PR08	Multi-Year Contract
PR09	Multi-Year Contract - Consumption
PR10	Multi-Year Contract - Purchase
PR20	Encumbrance Correction
PR21	Encumbrance Liquidation
PR22	Encumbrance Correction & Credit Memo

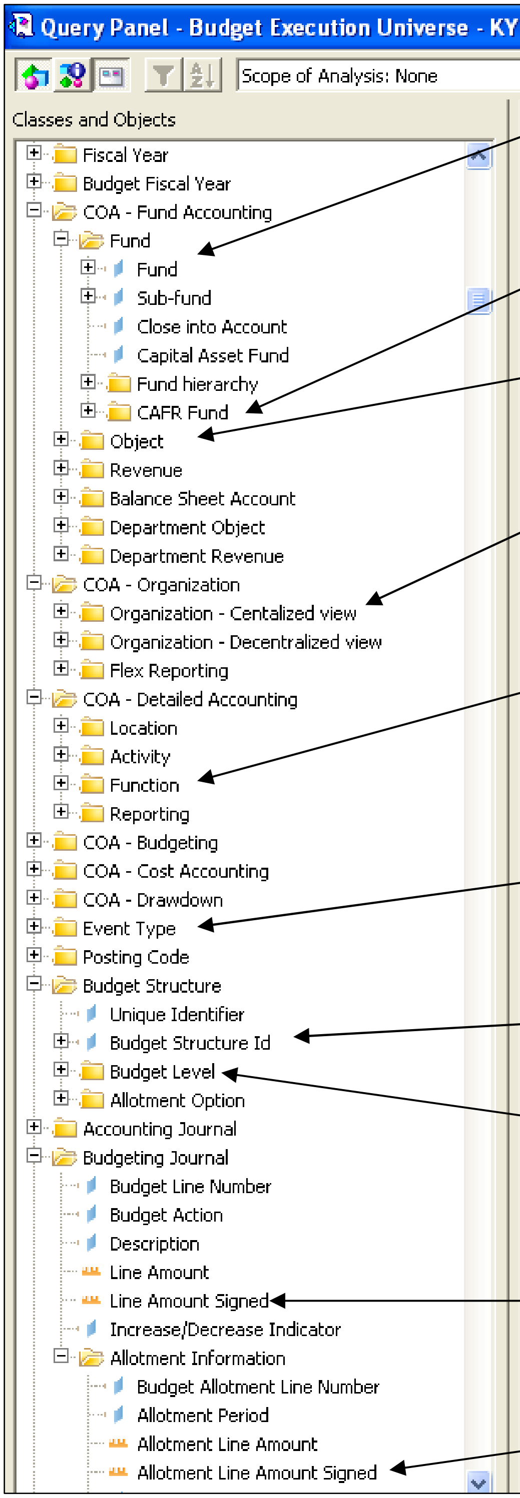
Event Type	Event Type Name
ST01	Request From Inventory - Non Accounting I
ST02	Request From Inventory - Non Accounting II
ST03	Request From Inventory - Pre Encumber
ST04	Request From Inventory - Encumber
ST05	External Request from Inventory - Non Accounting 1
ST06	External Request from Inventory - Non Accounting 2
ST10	Inventory/Stock Issuance - Quasi External
ST11	Inventory/Stock Issuance - Expenditure Refund
ST12	External Inventory/Stock Issuance - Quasi External
ST13	External Inventory/Stock Issuance - Reimbursement
ST20	Return Stock with Revenue
ST21	Return Stock with Reimbursement
ST22	External Return Stock with Revenue
ST23	External Return Stock with Reimbursement
ST30	Transfer Inventory with Provider Revenue
ST31	Transfer Inventory with Provider Reimbursement
ST40	Adjust Inventory Units & Accounts
ST41	Adjust Inventory Units Only
ST50	Request for Inventory - Consumption I
ST51	Request for Inventory - Consumption II
ST52	Request Inventory - Purchase
ST60	Order for Inventory - Consumption I
ST61	Order for Inventory - Consumption II
ST62	Order Inventory - Purchase
ST63	Encumbrance Correction - Consumption Method
ST64	Encumbrance Liquidation - Consumption Method
ST65	Encumbrance Correction & Credit Memo - Consumption Method
ST66	Encumbrance Correction - Purchase Method
ST67	Encumbrance Liquidation - Purchase Method
ST68	Encumbrance Correction & Credit Memo - Purchase Method
ST70	Authorize Payment for Inventory - Purchase Method
ST71	Authorize Payment for Inventory - Consumption Method
ST80	Pay for Inventory as Consumption by Check - Automatic
ST81	Pay for Inventory as Consumption by Warrant - Automatic
ST82	Pay for Inventory as Consumption as C.F. Warrant - Automatic
ST83	Pay for Inventory as Consumption by Check - Manual
ST84	Pay for Inventory as Consumption by Warrant - Manual
ST85	Pay for Inventory as Consumption as C.F. Warrant - Manual
TR01	Encumber for Travel
TR02	Travel Advance

Event Type	Event Type Name
TR03	Adjust Travel Costs
TR04	Travel Costs
UR01	UR Event Type for SRQ
UR02	UR Event Type for RQS
UR05	UR Event Type for PO
X001	Regular Budget
X002	Continued Budget
X003	Special Budget
X004	Budget Revision Due to Reorganization
X005	Necessary Government Expense
X006	Current Year Appropriation
X007	Surplus Expenditure Plan
X008	Salary and Health Insurance
X009	Budget Reduction Revision
X010	Other Budget Revision
X011	Tobacco Settlement- Phase 1
X050	Maintenance Pool Appropriation
X060	Appropriation from Non Maintenance Pool
X070	Appropriation - Heritage Land Conservation
X080	Appropriation- Coal Severance Tax
X120	
X500	Capital Construction Equipment Purchase Contigency Fund
X600	Emergency Repair Maintenance and Replacement
X630	
X640	Statewide Deferred Maintenance Fund
X666	Backout for Closed Projects
XA90	Internal Loan Payable
XA91	Internal Loan Receivable
XC01	On-Budget Transfer Out
XC02	Off-Budget Transfer Out
XC03	Transfer In
XCAP	Capital Project Allotment
XCWA	CheckWriter Intercept Payables
XGAA	Asset to Asset
XGAE	Asset to Equity
XGAL	Asset to Liability
XGAR	Asset to Revenue/Exp
XGEE	Equity to Equity
XGLL	Liability to Liability
XGLR	Liability to Revenue

Event Type	Event Type Name
XINA	Investment BSA Adj
XINI	Investment Adj Interface
XINR	Investment BSA/Rev Adj
XMEX	Monthly Expense Budget
XMRV	Monthly Revenue Budget
XN10	Intercept Transfer w/Same Banks - Earned
XP09	Revenue Refund
XPAR	Parks Accounts Receivable
XPRC	PRC Enc Correction
XPSC	UPPS Interface Only
XQEX	Quarterly Expense Budget
XQRV	Quarterly Revenue budget
XREV	Original Revenue Budget
XRMD	Modified Revenue Budget
XTR1	Travel Authorization
XX03	Revenue Refund-Auto
XX69	Revenue Refund-Manual
XXAR	Parks Acct Rec Reduction
XXCA	Cash Conversion
XXCO	Record Standard Program Charge-Off Set
XXEX	Conversion Exp
XXIA	Adjust Inventory Units & Accounts
XXIE	Internal Cash Expd/Expense Correction
XXIR	Internal Collected Revenue Correction
XXP3	Record Standard Program Charge-Non Reim
XXPI	Program income
XXRV	Conversion Rev
XYEX	Yearly Expense Budget
XYRV	Yearly Revenue Budget

Appendix H
Universe Tips





Fund is now what was PBU, Cash Account and Project

Within CAFR Fund, select CAFR Fund Type to get General, Restricted, etc.

Within Object, expand Object Hierarchy and select Object Type to get Personnel, Operating, etc.

Within Organization – Centralized view, you can select Cabinet, but Department has no data.

Within Function, expand Function hierarchy and select:
- Function Group for Appropriation Program
- Function Type for Allotment Program

Within Event Type, select Event Type to differentiate on the type of budget action (e.g., Continued, Regular, NGE, etc.)

Budget Structure ID:
3 = Operating
43 = Capital

Budget Level ID:
1 = Appropriations
2 = Quarterly Allotments
3 = Annual GF Allotment by Exp. Cat.

Line Amount Signed is the dollar amount.

This dollar amount is needed if you want to see Allotments by Quarter (Allotment Period).

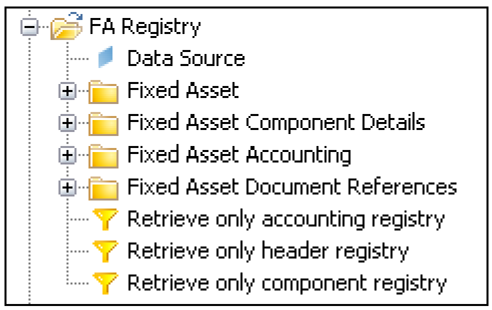
Appendix I
Fixed Asset Universe

Here are a few tips to creating reports using the *Fixed Asset Universe:*

- Pull attributes only from within the lower-level classes of the *FA Registry* class. You may experiment with pulling them in from other classes, but often the results are unpredictable.

  Testing has been focused mostly on this class.

- You should identify the level of data you want by using one of the three filters (see below). If you don't apply one of these, you will likely see duplicate data (because all three levels will be shown).



- **"Retrieve only accounting registry"** roughly corresponds to the Financial FARACTG;
  "Retrieve only header registry" roughly corresponds to FARHDR;
  "Retrieve only component registry" roughly corresponds to FARCOMP.
  All data is a "point in time" current picture of the value of the asset, etc.

- We have had the most success using "*Retrieve only component registry*". But "*Retrieve only header registry*" seems to work too.

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Appendix J
Cost Accounting Posting Code Information

Posting Codes Picked Up by the Reimbursement Offline Process

Grants and *Projects* set up as reimbursable *Programs* are reportable using the *KY Cost Accounting* universe. The following *Posting Codes* are picked up for reimbursement in the offline process which runs weekly**.**

Posting Code	Posting Code Name
C001	Standard Charge
C002	Back End Split Charge
C003	Revenue Credit
D013	Cash Expenditure/Expense - Warrants
D014	External Cash Expenditure/Expense
D015	Cash Bond Principle Expenditure/Expense
D022	Inventory Cash Expenditure/Expense
D025	Internal Cash Expenditure/Expense
XXPI	Program Income
A017	Operating Transfer Out

Note: A *Posting Code* is set up for reimbursement by setting the *Funding Split* flag on the *Posting Code* table to "*Split for Reimbursement*" = 3.

Posting Codes Picked Up by Cost Allocation

For *Departments* running *Cost Allocation* monthly, the following *Posting Codes* are picked up by that process.

Posting Code	Posting Code Name
D013	Cash Expenditure/Expense - Warrants
D014	External Cash Expenditure/Expense
D015	Cash Bond Principle Expenditure/Expense
D022	Inventory Cash Expenditure/Expense
D025	Internal Cash Expenditure/Expense
F021	Gain/Loss Expense from Sale of Fixed Asset
F022	Internal Expense from Fixed Asset Exchange
A017	Operating Transfer Out

Note: A *Posting Code* is set up for *Cost Allocation* by setting the *Cost Allocation Process* flag on the *Posting Code* table to "Cash Expenditure" = 2

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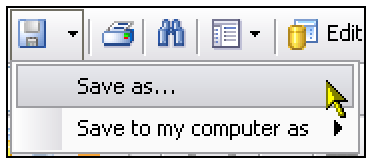
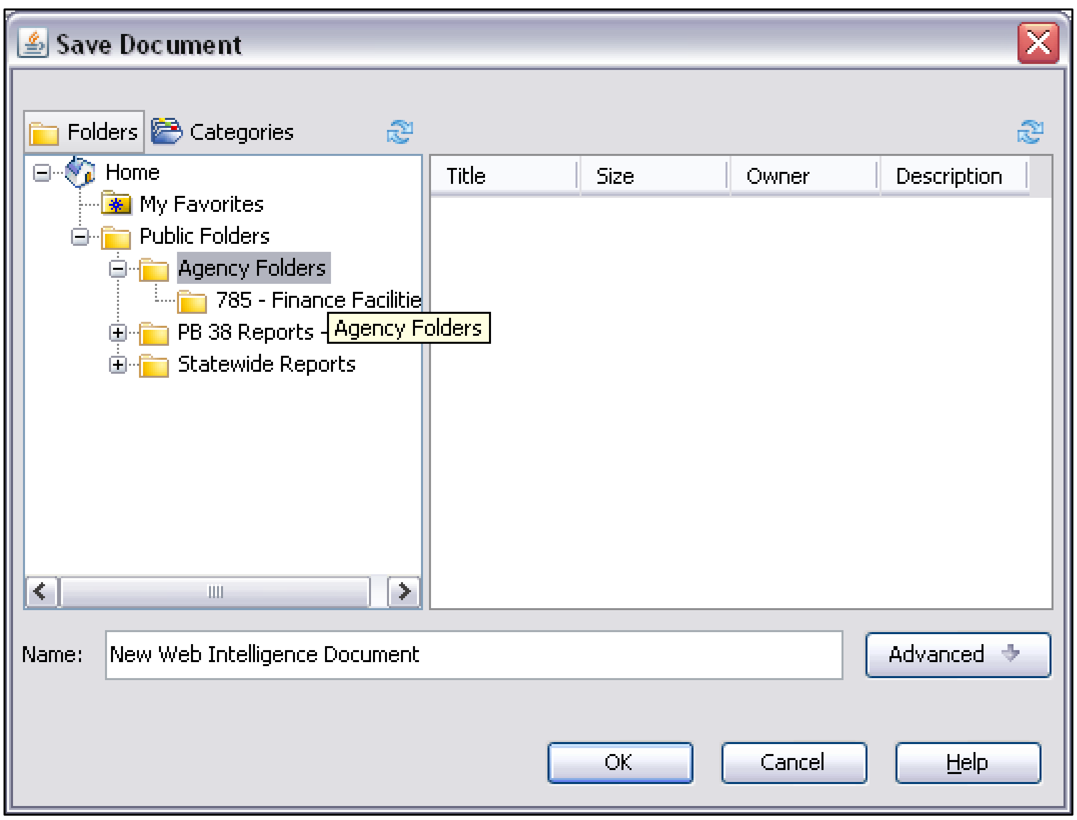
Appendix K
Save/Print/Send Reports

Saving Custom Reports - “Save As” or “Save to my Computer As”.

In order to save a report that you are creating or editing you will need to click on the drop down arrow next to the *Save* icon. If you click “Save As” you will be able to save the report to your *Favorites* folder or your departmental *Public* folder.



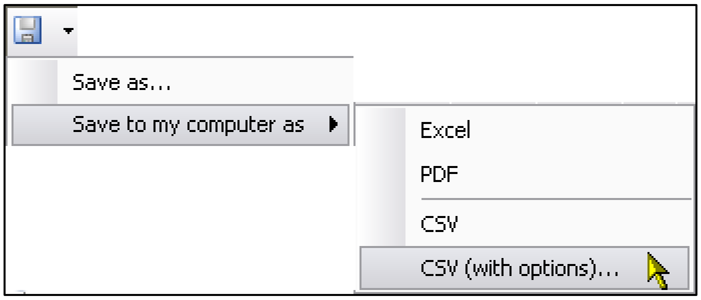
When the dialog box comes up, give your report a name, you may give it a description, and you may check the box to have it refresh on open (suggest that you leave this box unchecked). You will also need to select the *Location* to where you want the report saved. If you select *Favorites* the report will be saved to your *Favorites* folder but if you wanted to save it as a departmental report you would then select the proper location under *Public Folders* > *Agency Folders*.



Saving Reports to Your Computer

Open the report.

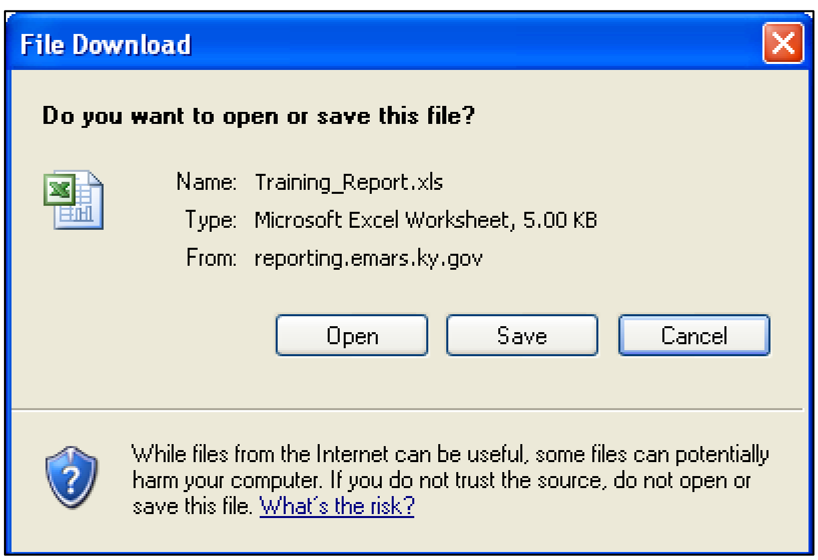
Click on ***Document*** at the top left of the report and then "*Save to my computer as*". You will have several different save options: PDF, Excel or CSV.



You may receive the following message at the top of your screen once you have selected you file type:

Click on the message and select *Download File*:

You will be directed back to the infoAdvantage *Home* screen. You will need to find your document and then go through the Save process a second time. You will now have the option to open or save the report to your computer.

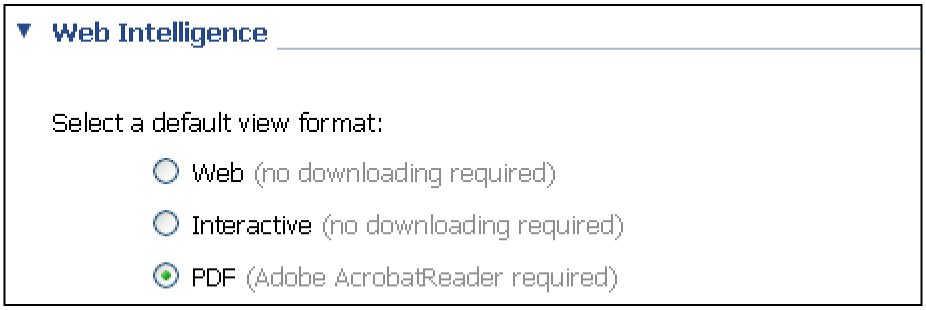


Printing Reports

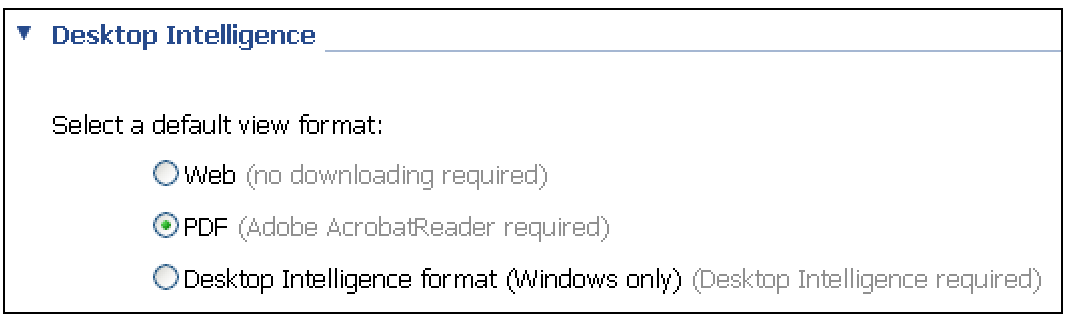
To print a report, you must first open the report in PDF mode.

Be sure under "*Preferences*" you have the following options selected:

Web Intelligence Document:

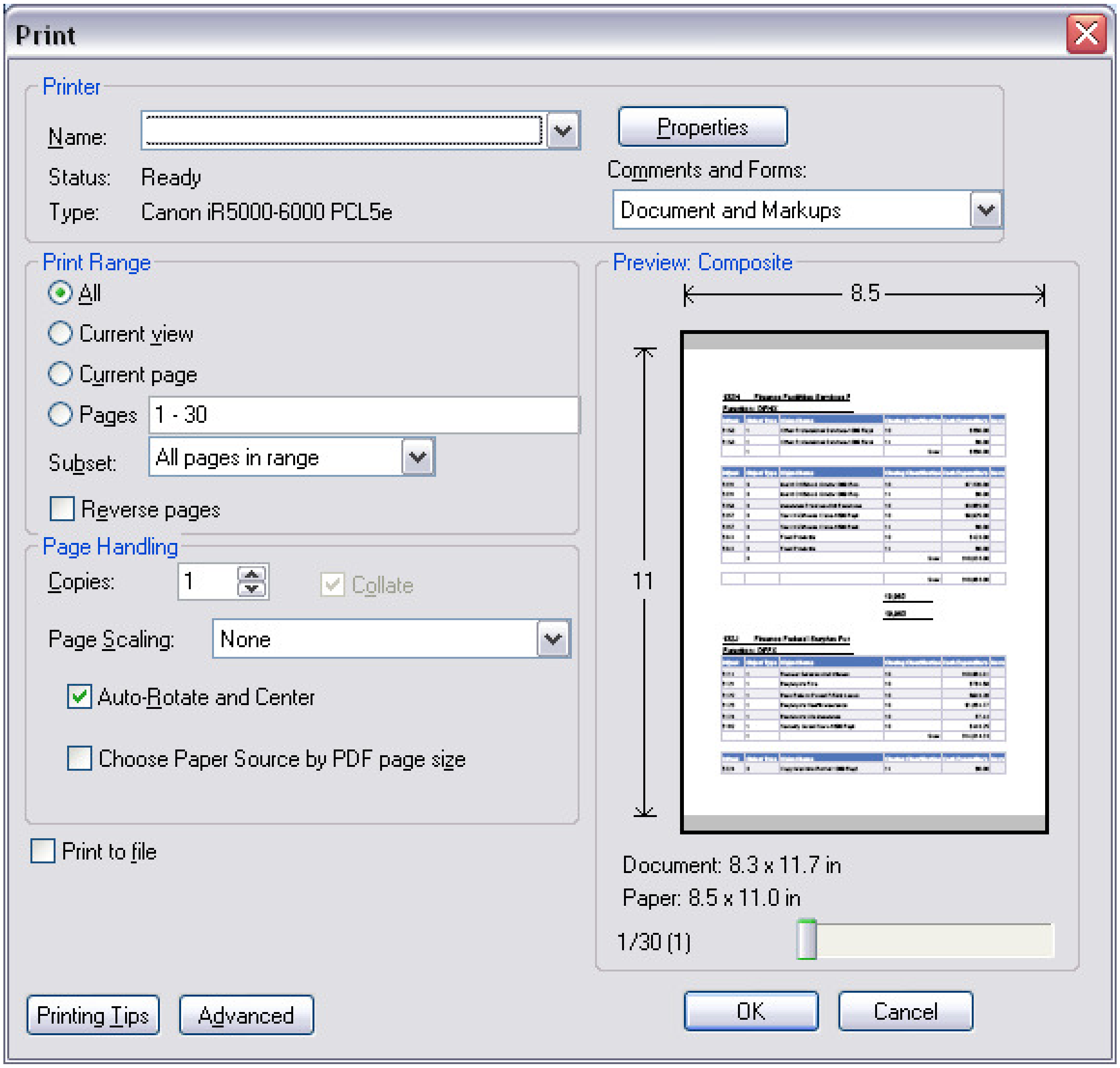


Desktop Intelligence (Thick Client):



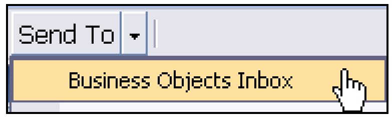
Click on the *Printer* at the top of the report.

You may then choose your printer and print the report.



Sending Reports to Other Users

Open up the report you wish to send to another user. Click *Send* on the *Home Panel Toolbar*. Click *Business Objects Inbox*.



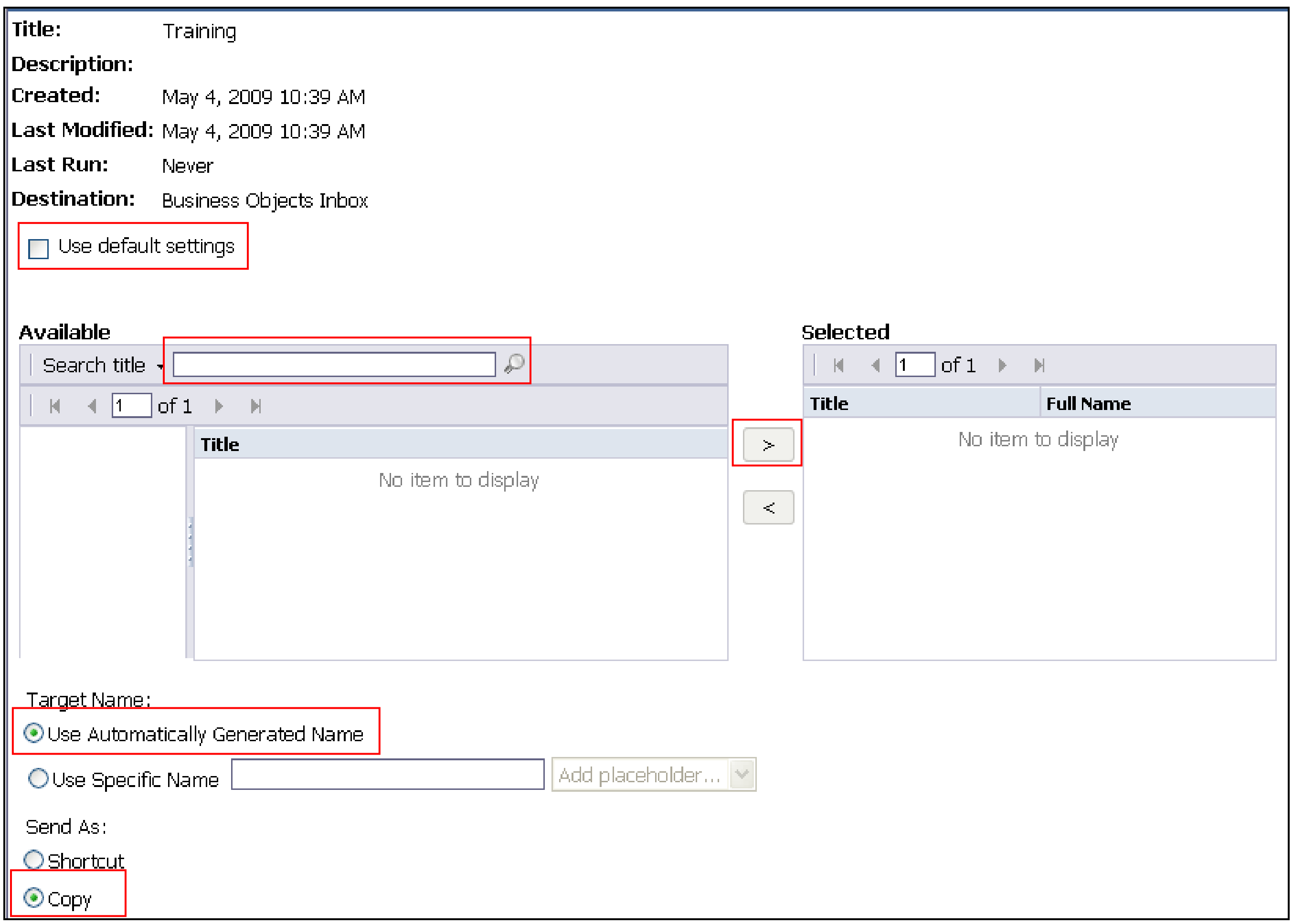
Deselect the "*Use default settings*" checkbox.

Type the user's *User ID* in the *Search title* box and click on the search button (maginifying glass).

The *User ID* will show up in the box on the left below *Available.* Click on the name(s) and click on single arrow pointing to the right (>). The name will be moved to the *Selected* box on the right.

Select *Use Automatically Generated Name* for the *Target Name* and *Copy* for *Send As*.

Click Submit (at the bottom of the page) to send the report to the selected users.



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Appendix L
Primary Verses Kernel Universes

The following is a list of *Universes* that are available in eMARS.
Universes marked as ***KERNEL*** in the list below should not be used for reporting.
Universes marked as ***PRIMARY*** should and will be used for reporting.

Primary Universes will contain one or several *Kernel Universes*. This design allows developers to update a *Kernel Universe* and have the changes reflected in all the *Primary Universes*.

PRIMARY UNIVERSES
Accounting Template and Profile
Accounts Payable
Accounts Payable - Kentucky
Accounts Payable Open Items
Accounts Receivable
Budget Execution Universe - KY
Cingular
Commodity Journal Universe
Cost Accounting
Document Phase Universe - KY
ePay
Fixed Assets
General Accounting
Inventory
KY-COA
KY Cost Accounting
KY_TempFYDAD
KY_YECash
PER
PCARD_DTL
Proc Solicitation Lifecycle Univ
Procurement Card
Procurement Awards Universe
Procurement Folder Universe
Procurement Matching Status
Procurement Post Awards Universe
Procurement Requisitions Universe
Proof of Necessity
Security and Workflow
Travel Accounting
Vendor ABA

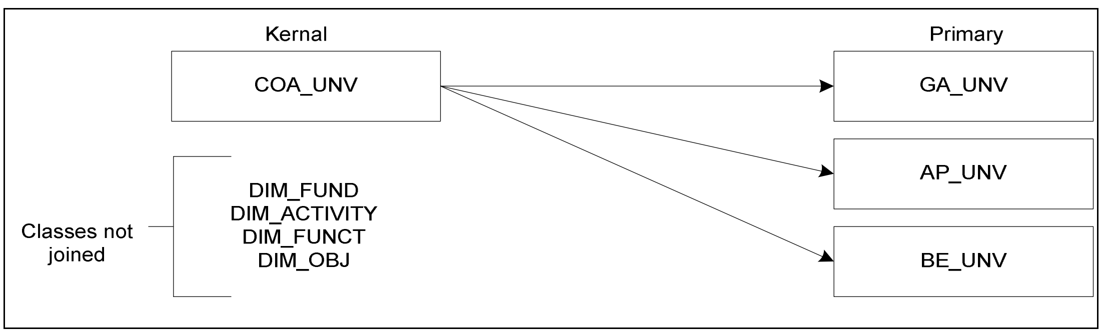
Note:
- **ePay and PER Universes require additional security.**
- **Cingular, ePay, PER, PCARD_DTL, and Universes with KY or Kentucky in the name are Custom universes and will not be included in the base-line documentation. See *Appendix N Additional Resources* for a link to the base-line documentation.**

KERNEL UNIVERSES

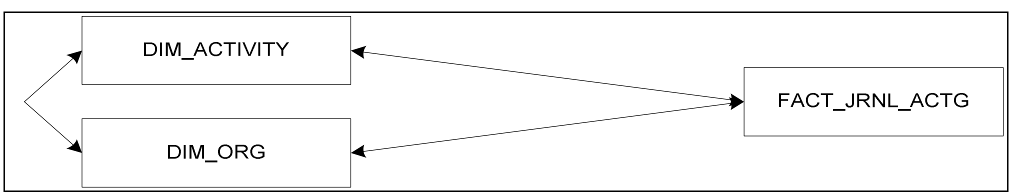
Accounting Journal Universe
Chart of Accounts
Commodity Universe
Common Reference Universe
Document Catalog
Geographic Location
Procurement Reference Info Universe
Time Universe
Vendor

Kernal Universes:

Mini *Universes*
Not set up with relationships
Created because they will be used in *Primary Universes*
Changes in *Kernal Universes* are referenced in *Primary Universes*



In the figure above, the *Kernal Chart of Accounts Universe* (COA_UNV), you can see that the classes within the universe are not joined together. When the *Chart of Accounts Universe* is joined to the *Primary Universes*, each class in *Chart of Accounts* is joined to a *FACT* table in one of the *Primary Universes.*

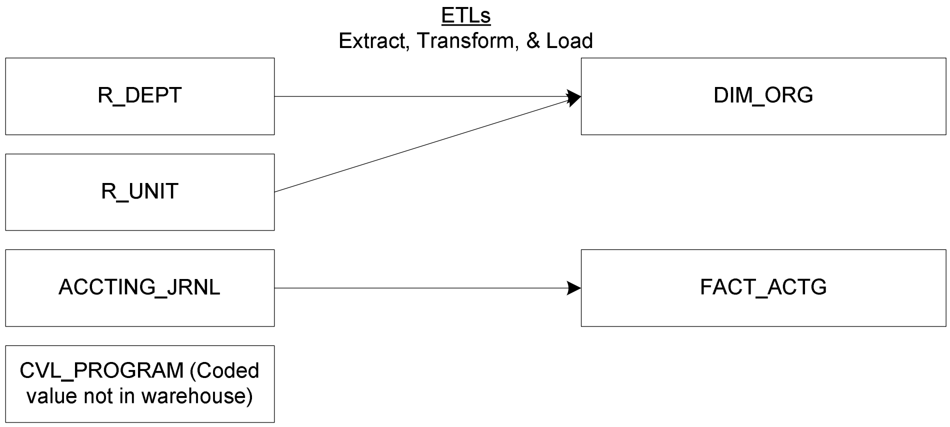


If the classes within the *Chart of Accounts Universe* were joined, an infinite loop would be created. In the figure above, the classes are show joined together but also joined to a fact table. If this were to happen in infoAdvantage a loop would be created that would look something like

Fact to *Activity* to *Org* to *Fact* to *Activity* to *Org*….etc

Fact to *Org* to *Activity* to *Fact* to *Org* to *Activity*….etc

Org to *Activity* to *Fact* to *Org* to *Activity* to *Fact*….etc

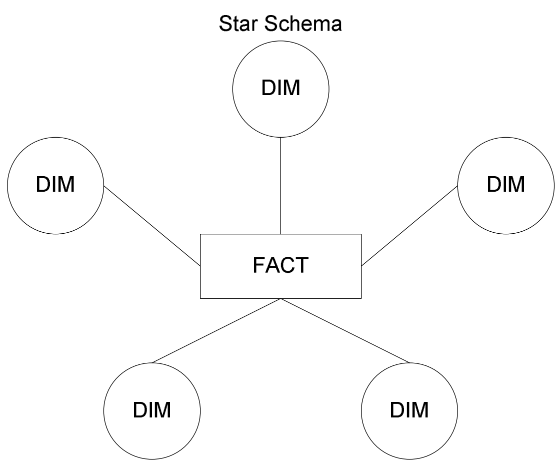


R_ = *Reference Table* in *Financial Database*

CVL_ = C*oded Values Table* in *Financial Database* – Not in *Reporting Database*

FACT = *Primary Table* in R*eporting Database* (Links to *DIM* tables)

DIM = *Reference Table* in *Reporting Database*



Appendix M
Advanced Functionality

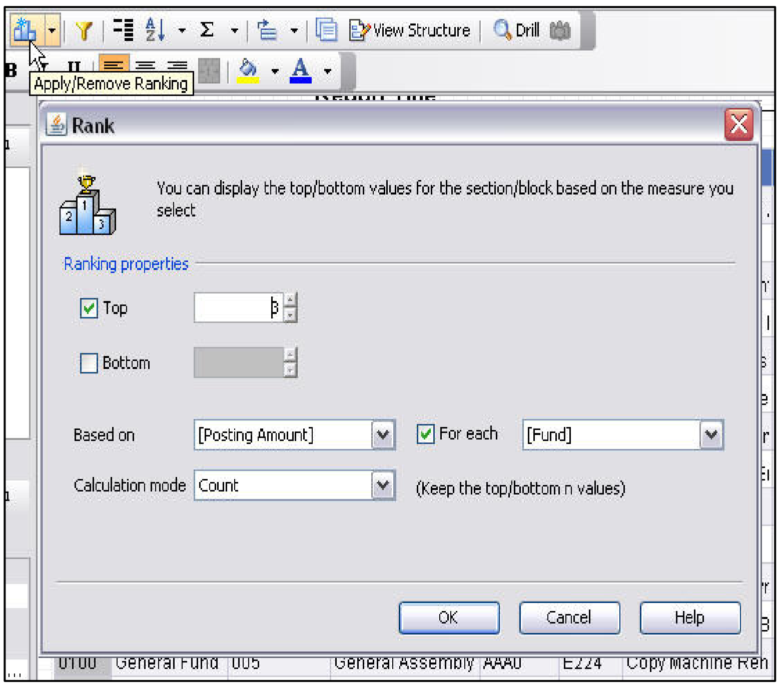
Sub-queries

Sub-queries enable you to add a Sub-query which the main query uses to determine filter values. This provides an additional way to answer complex business questions by allowing you to build data providers that include nested queries in their query filters. Web Intelligence first calculates the nested query and compares the object(s) in the query filter against its result.

Ranking

Ranking enables you to look at the largest and smallest numbers in a report. Like filtering, it hides the data you do not want to display. Desktop Intelligence does not delete the data from the report; you can view it again whenever you like by removing the ranking.

To apply a ranking, click on the data in the column you wish to rank and clink on the *Ranking* button.



To…	Do This…
Select the largest *n* values,	Click *Top* and select the value of *n*. (BusinessObjects selects 3 by default when you click *Top*.)
Select the smallest *n* values,	Click *Bottom* and select the value of *n*. (BusinessObjects selects 3 by default when you click *Bottom*.)
Select the top *n*% of values,	Click *Top*, click *In percentage of total number of values*, then select the value of *n*.
Select the bottom *n*% of values,	Click *Bottom*, click *In percentage of total number of values*, then select the value of *n*.
Display Subtotals relating to the values that appear in the report and the values that are omitted from the report,	Click *Display subtotals*.
Display percentages relating to the values that appear in the report and the values that are omitted from the report,	Click *Display percentages*.
Select the measure on which the ranking is based,	Choose the measure in the Based On combo box.

Combined Queries

Combined Queries allow you to add a *Union*, *Intersection*, or a *Minus* Query.

Union Queries

The *Union Query* allows two or more queries to be concatenated. This means that the columns in one query will be *appended* to the columns of another query, thus creating one large set of data out of two smaller sets. *Union Queries* are probably the most common used of the three types of combined queries.

Query A

Jenn	31
Chris	29
Melissa	27

Query B

Billy	54
Marlene	54

A Union B

Jenn	31
Chris	29
Melissa	27
Billy	54
Marlene	54

Intersection Queries

The *Intersection Query* returns the rows that are in common to two or more queries. This query is usually used to find what is duplicated in two different sets of data.

Query A

November	10
January	19
March	3
July	16

Query B

September	22
January	19
March	3
October	6

A Intersect B

January	19
March	3

Minus Queries

The *Minus Query* removes the rows that are in common in two queries and returns the remaining rows from the first query.

Query A

November	10
January	19
March	3
July	16

Query B

September	22
January	19
March	3
October	6

A Minus B

November	10
July	16

Rules for Using Combined Queries

There are a few rules that must be followed before you may use combined queries:

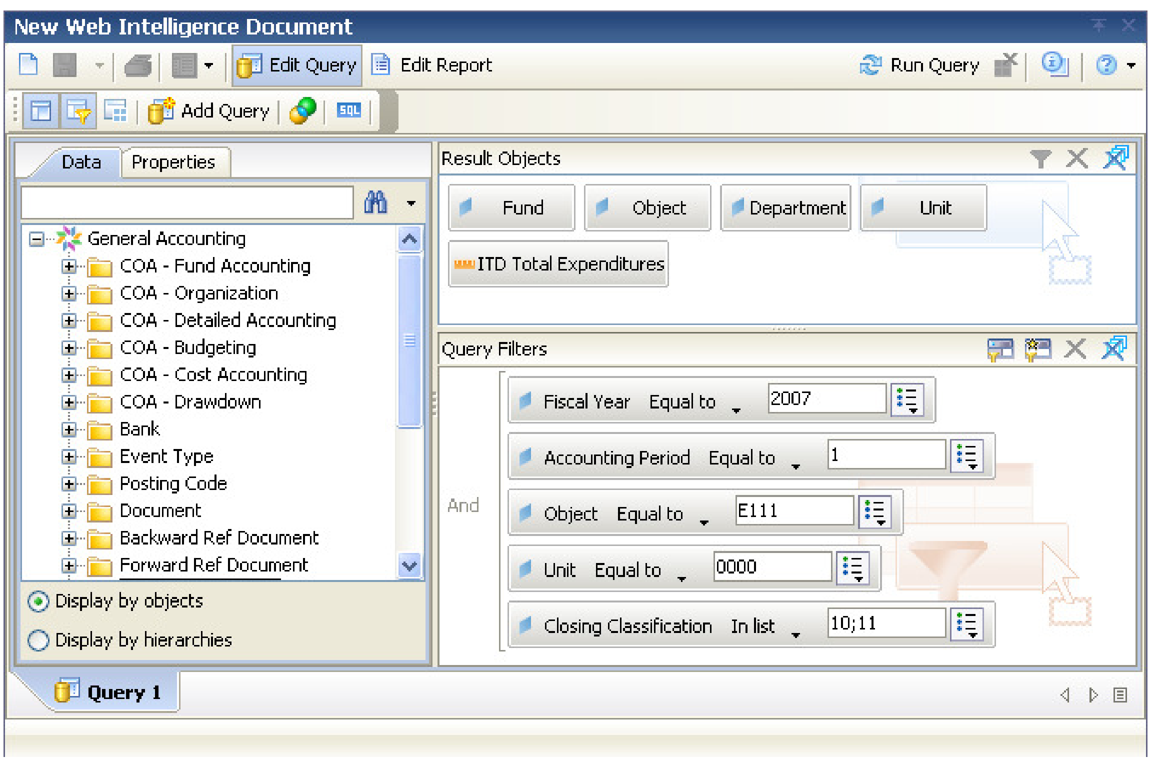
- Both queries must have the same number of columns. This is because the operators work on the columns in a set of data. In *Union Queries*, the operator wants to combine each column in one query to its respective column in another query. In *Intersection and Minus Queries*, the operators want to find the rows that are identical and either keep them or subtract them, respectively.
- The column types for each column must match their respective column types in the queries to be combined. This means that if the first column in query A is a number, then the first column in query B must also be a number. If the second column in query A is text, then the second column in query B must also be text.

If the above rules are not met, when you click the *Run* button you will receive an error message that the query will not be able to be executed.

Example Union Query

Let's look at a simple example of how a union query works. We are going to build a report that uses a union query to pull expenditures in one query and revenue in the other. We will also add two data providers—one that will show expenditures, one that will show revenue, so we may see how the data is all appended in one table by using the union query.

1) Using the ***General Accounting Universe***, we are going to build our first query using the objects and conditions below.

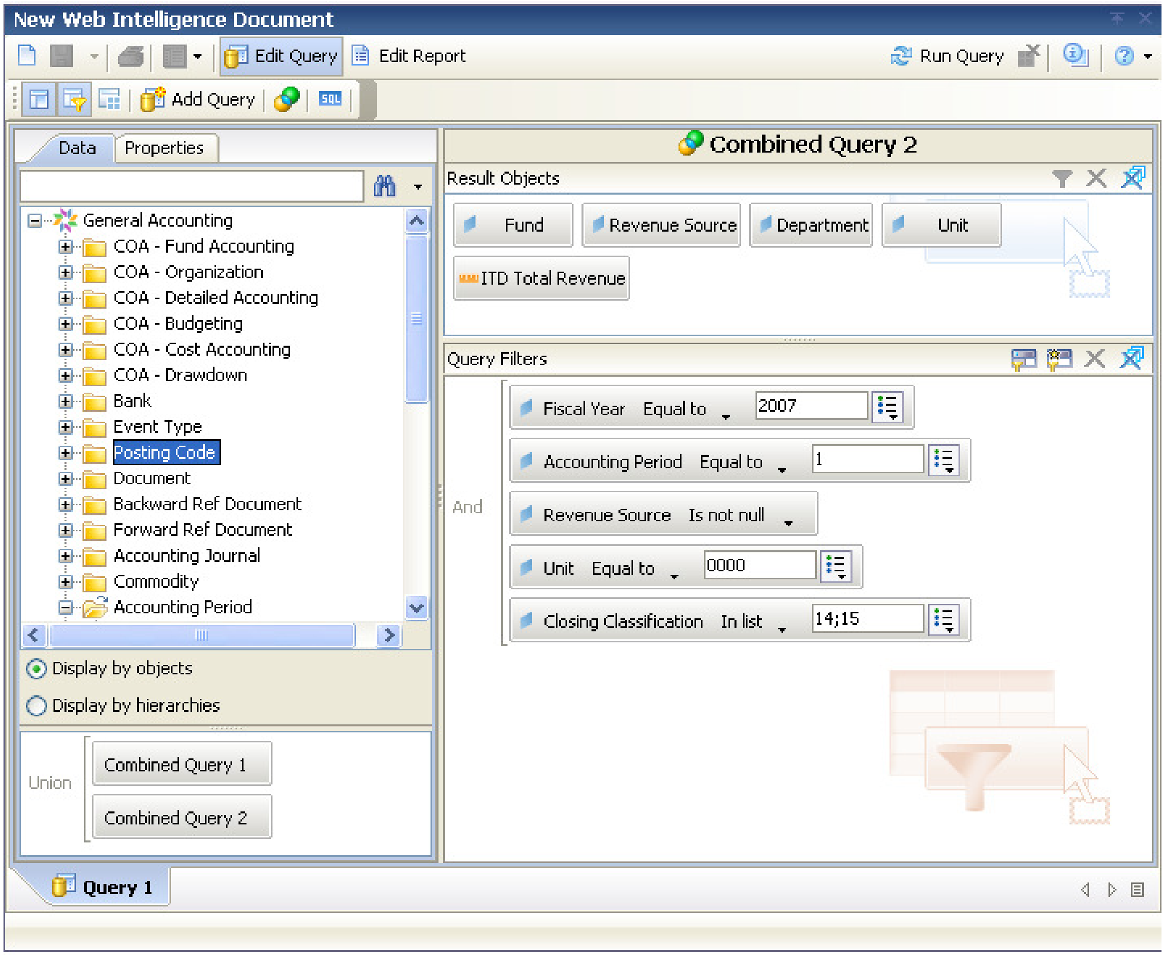


Note: The ITD Total Expenditures measure is found in the folder structure:

Accounting Journal > Calculated Amounts > ITD Total Expenditures

2) Next, we will create another query by clicking on the ***Combined Queries*** icon .

3) The **second query** will be built with the following **objects** and **conditions**. Notice the *Union* depicted in the lower left section of the query panel.



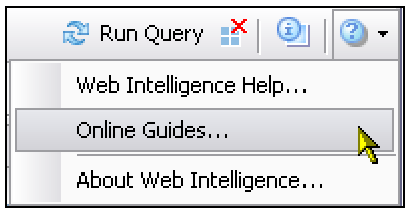
4) When we ***Run*** the union query, it will put everything – expenditures and revenue – in one table.

Fund	Object	Department	Unit	ITD Total Expenditu
3700	E111	785	0000	29,312.96
C21R	N882	785	0000	903,000
C22N	N137	785	0000	71,848
C23A	N137	785	0000	41,100

Appendix N
Additional Resources

Some additional resources for obtaining help with infoAdvantage:

- Within *Webi*, by clicking on the help icon, there are several other resources that provide information that will help you with building reports in *Webi*.



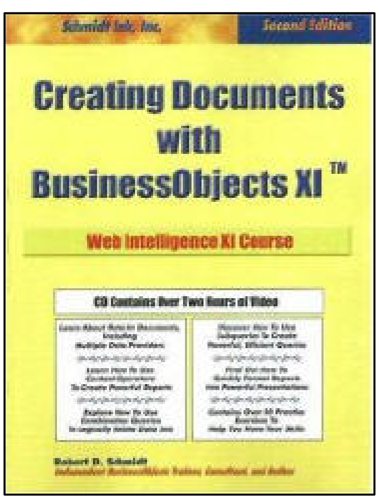
http://finance.ky.gov/internal/eMARS/reports.htm

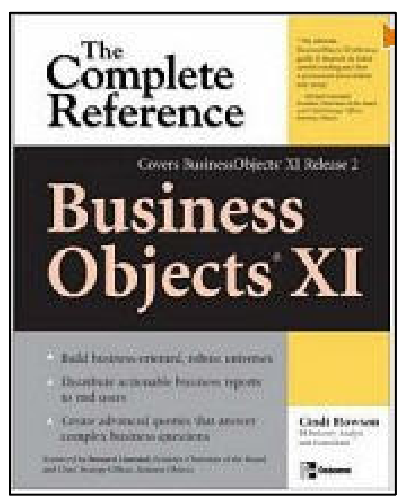
The eMARS website under the *Reporting* link offers a link to the infoAdvantage Universes and Reports Guide that provides a listing of the *Universes* that are available and what *Classes* they consist of.

Creating Documents with Business Objects: Web Intelligence XI Course by Robert D. Schmidt

The Complete Reference: Business Objects XI by Cindi Howson

These books may be purchased on Amazon.com.





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